No. 2024-1691

United States Court of Appeals for the Federal Circuit

VIRTUAL CREATIVE ARTISTS, LLC,
Appellant,

v.

KATHERINE K. VIDAL, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office,
Intervenor

Appeal from the United States Patent and Trademark Office in Office, Patent Trial and Appeal Board in No. IPR2022-01263.

BRIEF OF APPELLANT VIRTUAL CREATIVE ARTISTS, LLC

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August 12, 2024

Independent Claim of U.S. Patent No. 10,339,576 Held Unpatentable in the Final Written Decision and at Issue on Appeal

1. A computer-based system for generating multimedia content comprising:

(a) an electronic media submissions server subsystem including:

(1) one or more data processing apparatus,

(2) one or more database stored on a non-transitory medium; and

(3) a submissions electronic interface configured to receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user of the plurality of users, where the second user is not the first user,

wherein the first electronic media submission includes:

(i) data identifying the first user,

(ii) data identifying date and time associated with receipt of the first electronic media submission, and

(iii) data indicating content of the first electronic media submission;

(b) the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein;

(c) an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including:

(1) one or more second data processing apparatus, and

(2) an electronic content filter configured to apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user,

wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content; and

(d) an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CERTIFICATE OF INTEREST

Case Number 2024-1691

Short Case Caption Virtual Creative Artists, LLC v. Vidal

Filing Party/Entity Virtual Creative Artists, LLC

Instructions:

1. Complete each section of the form and select none or N/A if appropriate.
2. Please enter only one item per box; attach additional pages as needed, and check the box to indicate such pages are attached.
3. In answering Sections 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance.
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I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: 06/19/2024

Signature: s/David R. Bennett

Name: David R. Bennett

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	**2. Real Party in Interest.** Fed. Cir. R. 47.4(a)(2).	**3. Parent Corporations and Stockholders.** Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities. ☑ None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities. ☑ None/Not Applicable
Virtual Creative Artists, LLC		

☐ Additional pages attached

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

☐ None/Not Applicable ☐ Additional pages attached

Direction IP Law	David R. Bennett	Steven G. Kalberg

5. Related Cases. Other than the originating case(s) for this case, are there related or prior cases that meet the criteria under Fed. Cir. R. 47.5(a)?

☐ Yes (file separate notice; see below) ☑ No ☐ N/A (amicus/movant)

If yes, concurrently file a separate Notice of Related Case Information that complies with Fed. Cir. R. 47.5(b). **Please do not duplicate information.** This separate Notice must only be filed with the first Certificate of Interest or, subsequently, if information changes during the pendency of the appeal. Fed. Cir. R. 47.5(b).

6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

☑ None/Not Applicable ☐ Additional pages attached

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TABLE OF ABBREVIATIONS

‘576 Patent	United States Patent No. 10,339,576 (patent-in-suit) (APPX0075-APPX0131)
Board	Patent Trial and Appeal Board
Final Written Decision	Judgement, Final Written Decision Determining All Challenged Claims Unpatentable *35 U.S.C. §318(a)* (APPX0001-APPX0073)
IPR	*Inter partes* review
Ferrel	U.S. Patent 5,907,837 to Ferrel et al. (APPX0821-871)
Petition	Petition for Inter Partes Review of U.S. Patent No. 10, 339,576 (APPX0132-228)
Petitioner	Unified Patents, LLC
Saito	U.S. Patent 5,845,116 to Saito et al. (APPX0759-820)
Ziff	U.S. Patent 6,557,013 to Ziff et al. (APPX0727-758)
POSITA	Person of Ordinary Skill in the Art
VCA	Virtual Creative Artists, LLC (patent owner-appellant)

STATEMENT CONCERNING ORAL ARGUMENT

Appellant Virtual Creative Artists, LLC requests oral argument. Considering the technological nature of the patent, and the dispute over whether the prior art teaches or suggests the claimed invention, Virtual Creative Artists, LLC believes a question-and-answer exchange between counsel and the Court at oral argument would aid the decision process.

STATEMENT OF RELATED CASES

Pursuant to the Federal Circuit Rule 47.5, Virtual Creative Artists, LLC, states that no other appeal in or from the same civil action or proceeding below has been before this or any other appellate court. This appeal is from IPR2022-01263 in which a Final Written Decision was entered February 9, 2024. There are no litigations pending in any court asserting the claims of U.S. Patent No. 10,339,576 at issue in the IPR and this appeal.

I. JURISDICTIONAL STATEMENT

This is an appeal from a Final Written Decision in an *inter partes* review ("IPR") before the Patent Trial and Appeal Board ("Board"). Unified Patents, LLC ("Petitioner") began this proceeding by filing an IPR of Virtual Creative Artists, LLC's U.S. Patent No. 10,339,576. The Board had jurisdiction of the case pursuant to 35 U.S.C. §6(b)(4). This appeal is from the Board's Judgement and Final Written Decision entered February 9, 2024, pursuant to 35 U.S.C. §318, which disposed of all patentability issues raised in the IPR. (APPX0001-73). Virtual Creative Artists timely filed its Notice of Appeal on April 9, 2024. (APPX0417-21). This Court has jurisdiction pursuant to 28 U.S.C. §1295(a)(4)(A).

II. STATEMENT OF THE ISSUES

This appeal presents the following issues for review by the Court:

1. Whether there was a lack of substantial evidence to support finding that there is a motivation to combine *Ziff*, which discloses a single server system, with *Saito*, which discloses a specific priority-base distributed computing system, when *Saito* provides no benefit to *Ziff* and when the only motivation to combine was generic to distributed systems rather than the specific claimed distributed computing architecture?
2. Whether the Board erred as a matter of law by holding that the combination of *Ziff*, *Saito*, and *Ferrel* rendered obvious the challenged claims of the '576 patent when no reference discloses the distribution of subsystems with their own processors as required by the claims?
3. Whether the Board erred as a matter of law by holding that the combination of *Ziff*, *Saito*, and *Ferrel* rendered obvious the challenged claims of the '576 patent when the combination failed to disclose distributed software using a centralized database as required by the claims?
4. Whether the Board erred as a matter of law by holding that the combination of *Ziff*, *Saito*, and *Ferrel* rendered obvious the claims of the '576 patent when the combination failed to disclose searching by submission time of the media?

III. STATEMENT OF THE CASE

This is an appeal from a Final Written Decision holding that independent claim 1 and its dependent claims 2, 4–7, 10–12, 15, 16, 21, and 22 of U.S. Patent No. 10,339,576 (the "'576 Patent") are obvious over the combination of *Ziff*, *Saito*, and *Ferrel*.

A. U.S. Patent No. 10,339,576 – Claim 1

The '576 Patent is titled "REVENUE-GENERATING ELECTRONIC MULTI-MEDIA EXCHANGE AND PROCESS OF OPERATING SAME" with a priority date of at least May 5, 2000. (APPX0075-76). The '576 patent relates to a distributed process for creating media content based upon submissions received on an electronic multimedia exchange. (APPX0111 at 1:22–25). The problems that the inventors solved with the invention are: the need for media end users to interact with media creators to develop creative submissions which may be used in media content; and the need for an open exchange where submitted media works can be searched and viewed for use and purchase by third parties. (APPX0112 at 3:3–15).

The sole independent claim at issue in this appeal is claim 1. Claim 1 is a system claim:

> A computer-based system for generating multimedia content comprising:
>
> (a) an electronic media submissions server subsystem including:
>
> (1) one or more data processing apparatus,
>
> (2) one or more database stored on a non-transitory medium; and

(3) a submissions electronic interface configured to receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user of the plurality of users, where the second user is not the first user,

wherein the first electronic media submission includes:

(i) data identifying the first user,

(ii) data identifying date and time associated with receipt of the first electronic media submission, and

(iii) data indicating content of the first electronic media submission;

(b) the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein;

(c) an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including:

(1) one or more second data processing apparatus, and

(2) an electronic content filter configured to apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user,

wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content; and

(d) an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices.

Claim 1 is directed to a computer-based system for generating multimedia content using three operatively coupled distributed processing subsystems: a

submission subsystem, a creator subsystem, and a release subsystem. (APPX0130-31 at 39:22–41:6). The claimed system also has a content database that is part of the submission subsystem and is accessible by the creator subsystems. (*Id.* at 39:33-34, 54-55). Each subsystem has a distinct operation. The submission subsystem receives content that "may be transformed in the same form or adapted into multi-media content for distribution" and has a content database accessible by other subsystems. (APPX0112 at 3:26–30, 4:5–10). The creator subsystem allows a user to search for submitted content, select a submission, and modify and develop the submission, and it can access the content database. (*Id.* at 4:27–41). The release subsystem allows a user to view the final, developed submission. (*Id.* at 4:42–45). The '576 patent distinguishes this claimed distributed architecture from "a single computer acting as a central controller." (APPX0115 at 9:55-58; APPX2357 (¶31)). The distributed architecture is shown in Figure 3:

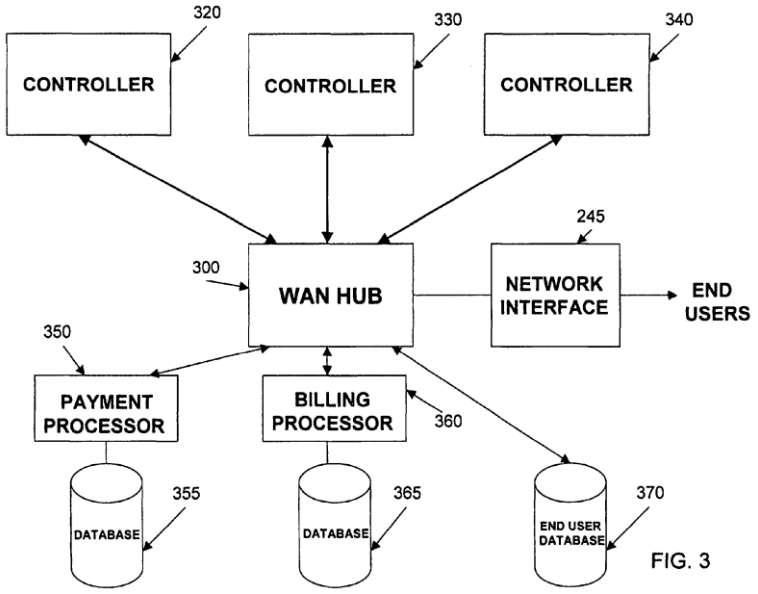

FIG. 3

(APPX0079 at Fig. 3).

The distributed architecture of the claims at issue therefore requires, among other things, at least three different processing apparatuses being a part of different types of server subsystems with a centralized database part of one subsystem:

- an electronic media submissions server subsystem including one or more database and one or more data processing apparatus (APPX0130 at 39:25-29),
- an operatively coupled electronic multimedia creator server subsystem including one or more second data processing apparatus and an electronic filter configured to obtain electronic media submissions from the one or more database and develop multimedia content (*Id.* at 39:48-58), and
- an operatively coupled electronic release subsystem including one or more third data processing apparatus (*Id.* at 39:62-64).

(APPX2358-59 (¶34)). This claimed computer-based distributed architecture had technical advantages over the other prior art systems known at the time. (APPX2358 (¶33)). Particularly, the claimed "arrangement yields a more dynamic and flexible system, less prone to catastrophic hardware failures affecting the entire system." (APPX0115, col. 10: 10-12; APPX2358 (¶33)).

All other claims at issue, claims 2, 4–7, 10–12, 15–16, and 21–22, depend directly from claim 1. Dependent claim 12 was also specifically argued during IPR:

> The computer-based system of claim 1, wherein the electronic filter applies criteria identifying a media submission's time of submission.

(APPX0130 at 40:33-35).

B. Asserted Prior Art

Petitioner argued that distributed computing systems were used for decades prior to the '576 Patent and that "[i]t was recognized in the 1970s that such [computing] power could be achieved inexpensively with collections of small devices rather than expensive single supercomputers." (APPX0669 (citation omitted)). The prior art references asserted by the Petitioner as the most relevant and relied upon in the Final Written Decision are:

- U.S. Patent 6,557,013 to Ziff et al. ("*Ziff*") (APPX0727-58);
- U.S. Patent 5,845,116 to Saito et al. ("*Saito*") (APPX0759-820); and
- U.S. Patent 5,907,837 to Ferrel et al. ("*Ferrel*") (APPX0821-71).

Although distributed computing system architectures were known in the art, as explained below, none of the prior art teaches the particular claimed distributed computing system architecture requiring subsystems with specific processors dedicated to specific applications or such distributed applications accessing a centralized database, which the '576 Patent describes as "a more dynamic and flexible system, less prone to catastrophic hardware failures affecting the entire system." (APPX0115 at 10:10-12).

1. U.S. Patent 6,557,013 to *Ziff*

a) *Ziff* Discloses a Single Server Using a Single CPU Performing the Functions of All Key Applications

Ziff is titled "STORY WORKFLOW MANAGEMENT SYSTEM AND METHOD" and states that the invention "relates generally to a system and method for managing the workflow associated with a story and in particular to a system and method for managing the workflow associated with the preparation, editing and creation of a story." (APPX0752 at 1:8-12).

Figure 1 of *Ziff* shows a single CPU 42 in a server 22 that is used for all of *Ziff*'s various applications, which is connected through a computer network 26 to a plurality of submitters, researchers, writers, and editors:

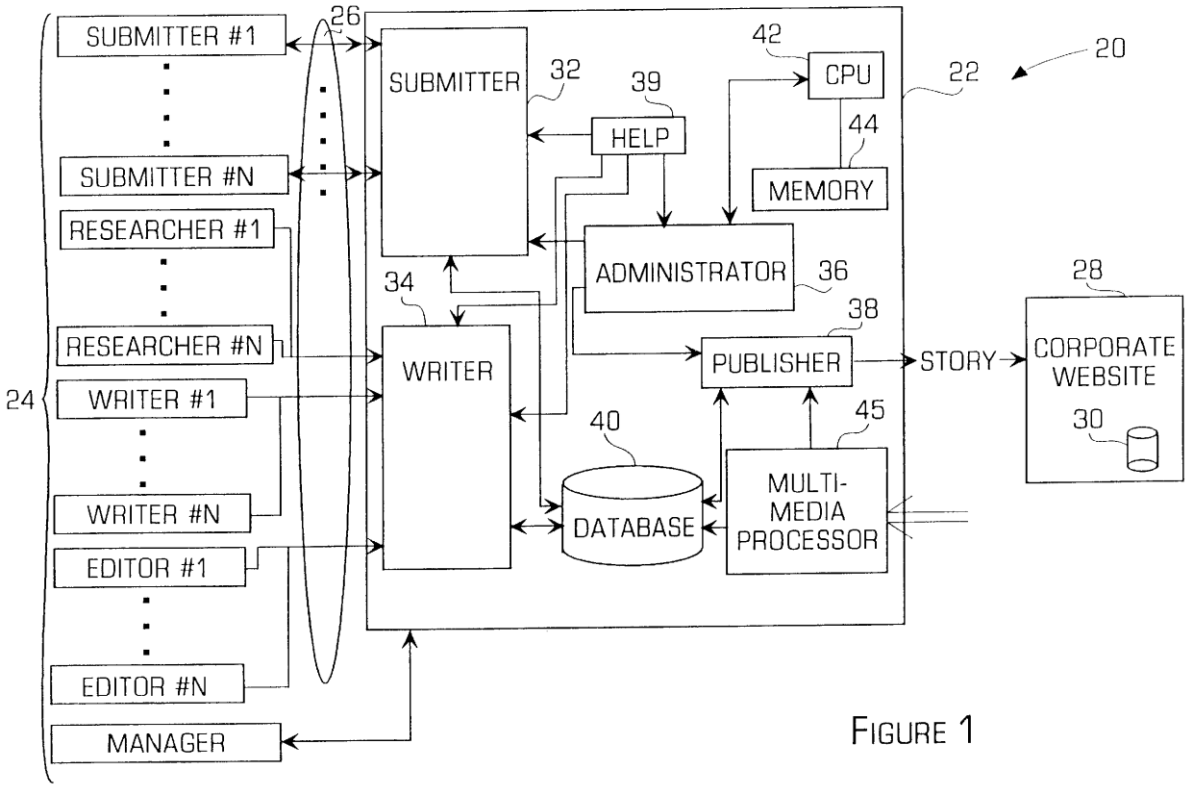

FIGURE 1

(APPX0728 at Fig. 1). The server houses all applications and has a single CPU 42 that executes all systems. (APPX0728 at Fig. 1; APPX0754 at 5:19-48; APPX0754 at 6:29-33, 37-41; APPX2360-61 (¶¶38, 41)). Client computers access the server and all its applications through a browser application, *i.e.*, all operations for all applications are executed on one CPU within one server. (APPX0754 at 5:19-48). A POSITA would understand that a highly integrated and controlled central server that performs functions for all key software applications is central to the invention and teachings of *Ziff*. (APPX2360-61 (¶¶39-42)). Furthermore, a POSITA would understand that changing *Ziff* to move any applications out of the single server would run counter to the teachings of a single centralized server in *Ziff* and the benefits of such a system. (APPX2361-62 (¶¶43-44)). For example, the centralized server executing the various applications is necessary for the key advantages in *Ziff* of speed, reliability, accuracy, and data control by the single processor. (*Id.*; APPX0752 at 2:4-6, 33-41, 45-57; APPX0753 at 3:28-6; APPX0754 at 5:19-48).

Furthermore, a POSITA would understand that any attempt to move the applications in *Ziff* outside of the centralized server 22 would cause the system to not work as intended. (APPX2362 (¶44)). At the time of the invention, in *Ziff* a localized central server was necessary to optimize the speed, reliability, accuracy and data control of the system. (APPX2361-62 (¶¶43-44); APPX0752 at 2:45-57; APPX0753 at 3:28-46; APPX0754 at 5:19-48; APPX0755 at 7:12-17). Sending

information between distributed servers would tend to create significant problems due to the limited available public network data transmission throughput, data transmission latency, data transmission accuracy, and the possibility of data transmission interceptability, decryption and monitoring. (APPX2362 (¶45)). A POSITA attempting to use *Ziff* in distributed multi-server systems would understand that such a system could not handle the necessary computations and data transfer in comparison to a single centralized server of similar cost. (*Id.*). For example, locating the database in *Ziff* on a separate server would result in slower data transfer that would then significantly slow down any processes, risk data loss or interception, and make administrative control much more difficult due to the additional risk of the system being compromised. (*Id.*).

b) Petitioner and its Expert Agreed that *Ziff* Does Not Teach Separate Subsystems on Their Own Processors

It is undisputed that the primary reference relied on by the Board, *Ziff*, does not have separate subsystems, but instead only teaches using a single, central, processing server 22 with a single CPU. (APPX0754 at 5:19-33, 6:29-44; APPX0168-69; APPX0679 (¶80); APPX2360-61 (¶¶38, 41, 43, 45), APPX2368 at (¶64); APPX0277-79). As admitted in the Petition:

> "Ziff's various software components are subsystems in a cooperative system, but ***Ziff does not expressly teach that each software application—which perform the respective functions of Ziff's story creation subsystems—are implemented on separate processors***. In other words,

> Ziff expressly teaches its subsystems, while distinct, are executed on the same CPU."

(APPX0155) (emphasis added) (citation omitted). Petitioner's expert also agreed that "a POSITA would have understood that *Ziff* does not teach a distributed system because *Ziff*'s multiple software applications are executed on the same server." (APPX0679 (¶80)).

2. U.S. Patent 5,845,116 to Saito

a) *Saito* Discloses a Priority-Based Distribution of Processing to Execute Particular Programs Across a Plurality of Computers Without a Content Database

Saito is titled "DISTRIBUTED COMPUTING SYSTEM" and states that it relates to a "distributed computing system, having a plurality of computers that differ from each other in terms of performance, load, and type, uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of 'urgency' or 'time limit'." (APPX0759 at Abstract). *Saito* uses "priority level determining means for determining a priority level suitable for executing a program in consideration of at least one of the performance and the load of each computer and an urgency level of processing executed by the program." (APPX0796 at 3:59-64).

To execute processing in the distributed computing system of *Saito*, "each user of the distributed computing system instructs any of the computers included in the distributed computing system to newly run his or her user program or instructs

the system to execute a previously existing program by inputting data through an input means." (APPX0800 at 11:7-12). *Saito* discloses selecting a computer within the distributed system to execute a program by using a priority queue of the programs and an urgency within the whole distributed computing system considering the performance, load, and type of computers within the system at the time the request is made or executed. (APPX0800 at 11:24-64). The distribution of the programs on computers is therefore not predictable prior to the selection of the computer. (APPX2367 (¶62)). If the selected computer does not already have the program to be executed on it, the program is sent to the computer. (APPX0805-6 at 22:52-23:2). Furthermore, the same programs can be distributed across multiple computers overlapping with other programs. (APPX0807 at 26:33-38). These separate computers within the distributed networks are not distributed subsystems because they only execute individual programs for operation on a specific computer that is not used in conjunction with programs on any other computer within the distributed system.

A POSITA reading *Saito* would understand that selection of the computer for execution of a particular program is not preselected based on content of the program but is instead selected based on the priority and urgency for execution of the program along with the available resources of the selected computer. (APPX2363 (¶49)). As such, a POSITA would understand that there is no guarantee of any particular

distribution of programs among a set of computers because it is not predictable. (APPX2363 (¶49), APPX2367 (¶62)).

Furthermore, *Saito* does not disclose a content database with content usable by each of the programs within the distributed system. (APPX2364 (¶50)). In fact, no one contended during the IPR that *Saito* disclosed distributed processors that access a centralized database. (APPX0152-54, APPX0680-83; APPX0014-15; APPX0036-38). The sole database disclosed by *Saito* is a "program location database [that] stores priority levels or urgency levels of programs performing the same operation and the identifiers of computers on which these programs run." (APPX0797 at 6:10-14). To the extent any data is input for a program, *Saito* only discloses "inputting data for a program through an input means such as a terminal or the like," not from a data storage or a database. (APPX0800 at 11:16-20). *Saito* also only discloses outputting data "as a display on a screen of a terminal or the like." (*Id.* at 11:20-23). *Saito* therefore does not disclose storing data in a database for use by a program or data distribution to a location other than the terminal of the computer executing the program. (*Id.* at 11:16-23). A POSITA would therefore understand that *Saito* does not address using a content database or a database usable by each of a plurality of programs. (APPX2364 (¶50)).

b) Petitioner Contended that *Saito* Discloses Any Configuration of Distributed Computing Systems and that *Saito*'s Priority-Based Allocations are Irrelevant

Petitioner acknowledged that *Saito* relates to "a distributed computing system having a plurality of computers for managing priority schemes." (APPX0152). However, Petitioner contended that "Saito's priority-based allocation teachings are ***not part*** of Petitioner's proposed combination." (APPX0321) (emphasis added). Instead, Petitioner argued that "Saito teaches 'a distributed computing systems having a plurality of computers for cooperatively executing programs, where each computer has a separate processing unit.'" (APPX0152 (*quoting* APPX0795 at 1:4-6)). This phrase from *Saito* is found in the first sentence of the background of the invention which continues "and more particularly to the configuration and method for such a distributed computing system which utilizes priority to realize real-time characteristics." (APPX0795 at 1:7-9).

3. U.S. Patent 5,907,837 to Ferrel - *Ferrel*'s Relevant Teachings are Limited to Search Criteria for Publication of Media

Ferrel is titled "INFORMATION RETRIEVAL SYSTEM IN AN ON-LINE NETWORK INCLUDING SEPARATE CONTENT AND LAYOUT OF PUBLISHED TITLES" and relates to an "information retrieval system and more particularly, to a system and method for indexing, querying and retrieving information in an on-line network." (APPX0821; APPX0847 at 1:12-15). The

invention is directed to an information retrieval server that "indexes and searches stories and other content objects, such as images and sound clips, in titles in an on-line network." (APPX0848 at 4:2-4).

Ferrel discloses "a find property storage 572 (an IStorage object) which contains a stream of data 574 corresponding to find property data." The "find property data" includes "date created," "CreatedTime," "ModifiedTime," and "Published Time and Date." (APPX0857 at 22:46-67). "The find properties are stored in an IR index in the IR system 398." (APPX0858 at 23:6-7).

Another embodiment in *Ferrel* discloses stories that are received at an MSN data center are stamped with their time of arrival and publishers can specify publication date and time as properties of the stories for search purposes. (APPX0866 at 40:43-49). However, in *Ferrel*, publication time entered by the submitter is the only time used for searching and the time of arrival is never used for any purpose in *Ferrel*. (APPX0866 at 40:43-60; APPX2371-72 (¶¶76-77)).

C. The Final Written Decision

The Board held that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 of the '576 patent would have been obvious over the combination of *Ziff*, *Saito*, and *Ferrel*. (APPX0071). No claim terms were construed.

1. The Final Written Decision Described *Ziff* as a Single Processor that Executes All Applications

The primary reference relied on by the Board was *Ziff*. (APPX0013). The Board described *Ziff* as a "story creation workflow management system" in which the steps of the story creation process are integrated in a single system that permits users to work at different times of day and different locations and allows users to rapidly determine the current status of any story in the system. (*Id.*). The Board described *Ziff* as having three applications. (APPX0014). The submission applications system generates a user interface to gather information from a user about a story, and the information and data are stored in a database. (*Id.*). The writer system that uses the stored data to create media. (*Id.*). And the publisher that releases finalized media. (*Id.*). *Ziff* only discloses a single CPU that executes the three different software applications. (*Id.*).

2. The Final Written Decision Described *Saito* as Disclosing a Very Specific Distributed Computing System Which Utilizes Urgency and Priority

The secondary reference relied on by the Board was *Saito*. (APPX0013). The Board explained that *Saito* disclosed a specific distributed computing architecture:

> Saito's invention relates to a distributed computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs, and more particularly to the configuration and method for such a distributed computing system which utilizes priority to realize real-time characteristics. Saito's distributed computing system has a plurality of computers that differ

> from each other in terms of performance, load, and type, and uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of "urgency" or "time limit." Each of the computers includes a priority level conversion procedure for performing a conversion between an urgency level and a priority level of processing in accordance with the performance and the load of the computer.

(APPX0014-15) (internal quotation marks and cites removed). This Board did not contend that *Saito* disclosed any other specific distributed computing architecture. (*E.g.*, APPX0014-15).

3. Even though *Saito* Disclosed a Specific Distributed Architecture, the Board Found *Saito* Generally Disclosed Any Distributing Computing System Having a Plurality of Computers Connected to a Network for Cooperatively Executing a Plurality of Programs

Despite describing *Saito* as teaching a very specific distributed computing system architecture, the Board adopted Petitioner's assertion that *Saito* discloses any "distributing computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs." (APPX0022 (*citing* APPX0795 at 1:4–6)). Like Petitioner, for this very broad disclosure, the Board latched on to the single phrase in the first sentence in the Background of the Invention in *Saito* that "[t]he present invention relates to a distributed computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs." (*Id.*). The Board contended that this single phrase is the entirety of the disclosure in *Saito* for the distributed processing

architecture relied on for the obviousness finding. (APPX0022). The Board concluded that, in view of the single phrase in *Saito*, the obviousness argument is then a "relatively straight-forward modification, which simply involves executing Ziff's subsystems on separate processors, as taught by Saito." (APPX0021).

4. The Final Written Decision Acknowledged that *Saito* does not Disclose the Claimed Architecture and Only Cites *Saito* Once in the Obviousness Analysis of Claim 1

VCA challenged whether *Saito*'s disclosures adequately explain why the resulting distributed multi-processor system would have the precise arrangement and correspondence between the three particular subsystems in claim 1 of the '576 patent. (APPX0024). The Board initially contended that *Saito* disclosed the arrangement in the '576 Patent but the Board did not cite to any portion of *Saito*. (APPX0024-25). Instead, on the next page, the Board restated its obviousness combination by ***dropping*** *Saito* and instead relying solely on *Ziff* and the general idea that distributed computing systems were known in the art and therefore a POSITA would implement the distributed computing system architecture in claim 1 of the '576 patent:

APPX0024	**APPX0025**
In particular, a skilled artisan would have modified Ziff's system to so that submitter 32 (the "media submissions server subsystem"), writer 34 (the "multimedia creator server subsystem"), and publisher 38 (the "release subsystem") utilize separate	Indeed, a POSITA would have been motivated to modify Ziff so that submitter 32 ("media submissions server subsystem"), writer 34 ("multimedia creator server subsystem"), and publisher 38 ("release subsystem") utilize separate processors,

processors ***based on Saito's teaching of a distributed system with multiple processors***, such that "Ziff's submission, creation, and release subsystems could execute in parallel."	as doing so would improve Ziff's system by allowing it to "complete stories faster."

(APPX0024 (emphasis added), APPX0025).

Despite contending that the obviousness analysis relied on *Saito*, the Final Written Decision then proceeded with the obviousness analysis of the challenged claims with only one citation to *Saito* in only one place of the entire analysis. (APPX0036 (*citing* APPX796 at 3:36-49)). The sole citation was to explain that "Saito expressly teaches the benefit in distributed computer systems of being able to utilize distributed processors to take advantage of different computers' 'performance, load, and type.'" (APPX0036 (APPX796 at 3:36– 49)). The Final Written Decision did not cite to, or rely on, any other language in *Saito* when analyzing the claim limitations. (*See* APPX0037-0070 (no citation to "Ex. 1005" (*Saito*)).

5. The Final Written Decision Acknowledged that *Ferrel* does not Disclose Searching by Submission Time

For the challenged limitation in claim 12 of searching by submission time, the Board acknowledged that *Ferrel* does not teach searching by submission time as required by the claim. (APPX0031). The Board found that time was important to the *Ziff* system because *Ziff* discloses status pages automatically updated in real time and therefore the submission time would have been one common way of

implementing *Ziff*'s predetermined time period that could be implemented in hours rather than days to improve accuracy. (APPX0032-33).

IV. SUMMARY OF THE ARGUMENT

The Board erred as a matter of law holding that the claims of the '576 Patent were obvious over the combination of *Ziff*, *Saito*, and *Ferrel*.

First, there is no motivation to combine *Ziff* and *Saito*. *Ziff* only discloses a single server system for managing story workflow associated with the preparation, editing, and creation of a story. The improved speed of the story workflow in *Ziff* results from the system tracking the story workflow rather than a person managing the workflow. Faster computer processing through distributed processors would therefore not increase the speed of the story workflow process in *Ziff*. On the other hand, *Saito* teaches a specific distributed computing architecture having a plurality of computers that differ from each other in terms of performance, load, and type, and the system uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of "urgency" or "time limit." In *Saito*, programs can be distributed for execution to any of the computers in the distributed architecture based on a priority-based analysis. There is no guidance in *Saito* for a distributed computing architecture other than its specific priority-based program distribution. *Ziff*'s single server system would not benefit from *Saito*'s priority-based distributed computing systems because they are unrelated systems. As such,

there is no motivation to combine *Ziff* and *Saito* because *Saito* would not increase the speed or efficiency of the *Ziff* system.

Second, even if *Ziff* and *Saito* were combined, the combination does not disclose specific processors dedicated to specific subsystems as required by the claims of the '576 Patent. There is no dispute that *Ziff* does not disclose subsystems with dedicated processors. There is also no dispute that *Saito* only discloses a priority-based distribution of programs across multiple processors such that processors are not dedicated to specific subsystems. So, the combination of *Ziff* and *Saito* does not arrive at the claimed invention. The Board recognized this by dropping *Saito* from its analysis, citing to *Saito* only once in its entire obviousness analysis of the claim language, and instead contending that the general idea of distributed computing systems combined with *Ziff* is sufficient to render the claims obvious. However, the general idea of distributed computing systems does not teach the specific distributed computing system requiring subsystems with specific processors dedicated to specific applications as required by the claims of the '576 Patent. Furthermore, if as the Board contended the claimed architecture was a "relatively straight-forward modification" of *Ziff* in view of the decades of use of distributed systems, why could Petitioner not find any prior art reference closer to the claimed distributed computing architecture than the non-dedicated, priority-based distribution disclosed in *Saito*? The only way to combine *Ziff* and *Saito* to

arrive at the claimed distributed computing architecture would be by improper hindsight using the claimed invention as a roadmap.

Third, even if *Ziff* and *Saito* were combined to create the claimed distributed subsystems, neither *Ziff* nor *Saito* alone or in combination disclose a centralized database accessed by distributed processors dedicated to specific subsystems. *Ziff* only teaches applications operating and communicating with a content database when they are located on the same local server. No one argues that *Saito* discloses distributed processors that access a centralized database. The Board contended that there was evidence in the record supporting distributed processors that access a centralized database, however, the record cited by the Board contains no analysis involving a centralized database, let alone a discussion of distributed processors accessing a centralized database. The Board therefore lacked any evidentiary support for its factual finding on this issue.

Fourth, adding *Ferrel* to the combination of *Ziff* and *Saito*, does not render obvious the limitations "the first electronic media submission includes:… data identifying date and time associated with receipt of the first electronic media submission" in claim 1 and "the electronic filter applies criteria identifying a media submission's time of submission" in claim 12. *Ziff* does not disclose storing submission time for any purpose. *Ferrel* expressly teaches searching by publication time, not submission time. Combining *Ziff* and *Ferrel* would result in the *Ziff* system

searching by publication time, not submission time. Petitioner argued that the motivation to combine and then modify the combination to search by submission time would allow for more options to sort submissions more accurately. However, there is no evidence that any user of the system would desire any such granularity of searching by submission time. Again, when Petitioner did not find any prior art disclosing these claim limitations, at best the Board used the claims of the '576 Patent as a roadmap for improving *Ziff*, which is an improper analysis.

The Court should therefore reverse the holding in the Final Written Decision that independent claim 1 and its dependent claims 2, 4–7, 10–12, 15, 16, 21, and 22 of U.S. Patent No. 10,339,576 (the "'576 Patent") are obvious.

V. ARGUMENT

A. Legal Standards

1. Standards of Review

The Court "review[s] the Board's obviousness determination *de novo* and its underlying factual determinations for substantial evidence." *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1357 (Fed.Cir. 2019). "The substantial evidence standard asks 'whether a reasonable fact finder could have arrived at the agency's decision,' and 'involves examination of the record as a whole, taking into account evidence that both justifies and detracts from an agency's decision.'" *Id*.

2. Statement of the Law

"Obviousness is a question of law based on multiple underlying factual determinations, including whether a [POSITA] would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so." *Id.* (internal citations omitted). "It does not suffice to meet the motivation to combine requirement to recognize that two alternative arrangements… were both known in the art." *Virtek Vision Int'l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed.Cir. 2024). There must be a reason why a skilled artisan would choose one specific arrangement over another. *Id.* Conclusory expert testimony "that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so" is insufficient to support a motivation to combine. *InTouch Techs., Inc. v. VGo Communs., Inc.*, 751 F.3d 1327, 1352 (Fed.Cir. 2014). For example, a statement that "a person of ordinary skill in the art would have known, based on the 'modular' nature of the claimed components, how to combine any of a number of references to achieve the claimed inventions" "is not sufficient and is fraught with hindsight bias." *ActiveVideo Networks, Inc. v. Verizon Communs., Inc.*, 694 F.3d 1312, 1327 (Fed.Cir. 2012). Such a generic statement "fails to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way*

the claimed invention does." *Id.* at 1328 (*citing KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 1418 (2012)).

B. The Final Written Decision Should be Reversed

The claims of the '576 Patent are not obvious in view of *Ziff*, *Saito*, and *Ferrel*. First, there is no motivation to combine *Ziff* and *Saito*. *Ziff* is a single-server system and the specific distributed computing system in *Saito* would not provide any benefit to the system in *Ziff*. Second, even if *Ziff* and *Saito* are combined, the combination would not arrive at the claimed invention. Third, neither *Ziff* nor *Saito* disclose the claimed distributed architecture requiring at least three separate "server subsystems" each with its own "data processing apparatus" and specifically configured operations, and a centralized "database." Finally, adding *Ferrel* to the combination fails to satisfy the limitation of storing and searching by a media's submission time to the system. The Court should therefore reverse the holding of obviousness of claim 1 and dependent claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 of U.S. Patent No. 10,339,576.

1. There is No Motivation to Combine *Ziff* and *Saito*

The Board summarizes its motivation to combine *Ziff* and *Saito* as a "relatively straightforward modification, which simply involves executing Ziff's subsystems on separate processors, as taught by Saito." (APPX0021) (internal quotes and citation removed). Except there is no benefit of using a distributed

computing system with *Ziff,* and *Saito* does not disclose the claimed distributed computer system architecture. *Saito* discloses a different architecture to solve a different problem. So, using *Saito* would not result in any benefit to the *Ziff* invention, nor would the combination result the invention in the claims of the '576 Patent.

a) *Ziff* Does Not Teach a Distributed Architecture nor does *Ziff* Have a Need for Increased Computer Processing Speed

The sole disclosed system in *Ziff* is a single server for a story workflow management system to track the story creation process from initial lead generation to final publication that is more easily managed. (APPX2362 (¶45); APPX0752 at 2:45-58; APPX0753 at 3:28-46; APPX0754 at 5:19-48; APPX0755 at 7:12-19). All applications in *Ziff* operate on one CPU in one server. (APPX0728 at Fig. 1; APPX0754 at 5:19-48, 6:29-33, 37-41; APPX2360-61 (¶¶38, 41); APPX0679 (¶80)). No one contends that *Ziff* discloses a distributed computing system. Nor is there anything in *Ziff* that suggests the benefits of distributing the operation of applications to other servers and computers. (APPX2361-62 (¶¶43-44); APPX2368 (¶64)). In fact, Petitioner's expert agreed that "a POSITA would have understood that *Ziff* does not teach a distributed system because *Ziff*'s multiple software applications are executed on the same server." (APPX0679 (¶80)).

However, in supporting a motivation to combine, the Board incorrectly states that "Ziff teaches the desirability of increased processing speed." (APPX0026). For this finding, the Board relies on the disclosure in *Ziff* of "increas[ing] the speed at which a story is prepared," which relates to the "story workflow management process," not the speed of a computer processor or the speed of computer processing. (APPX0026 (*citing* APPX0752 at 2:54-58)). *Ziff* describes the "story workflow management process" as "the creation of a story may include receiving a submission for a new story, rating the story idea, checking the story's facts, writing the story and preparing the story for publishing" which is "completed by one or more different people, but no one was easily able to monitor the entire story workflow process." (*Id.* at 1:18-24). The problem described in *Ziff* is "it is difficult to ensure that the entire process was completed correctly and that each step was in fact completed" and it was "difficult for a person trying to manage the story workflow to ensure each step is being completed in a timely manner." (*Id.* at 1:24-28). The length of time for the story workflow process is controlled by making sure people do their work in a timely manner, not by the speed of a computer processor or computer processing. (*Id.* at 1:18-28). The *Ziff* system for monitoring the story workflow process may increase the speed of the story workflow process, but the story workflow process would not benefit from putting the system on multiple processors. (APPX2361-62 (¶¶43-45)). Instead, the centralized server executing various applications is a key

advantage in *Ziff* of speed, reliability, and accuracy. (*Id.*; APPX0752 at 2:4-6, 33-41, 45-57; APPX0753 at 3:28-6; APPX0754 at 5:19-48).

b) *Saito* Discloses a Specific Distributed Software and Hardware Architecture, Not Every Distributed Computing System Architecture

For the distributed computing system architecture of claim 1 of the '576 patent missing in *Ziff*, the Board turned to *Saito* contending that *Saito* generally teaches distributed computing systems: "Saito teaches that its 'invention relates to a distributing computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs.'" (APPX0022 (*citing* APPX0795 at 1:4-6)). This quote is a fragment of a sentence in the Background of the Invention of *Saito* that continues "and more particularly to the configuration and method for such a distributing computing system which utilizes priority to realize real-time characteristics." (APPX0795 at 1:7-9). *Saito* states in one phrase that there are distributed computing systems but then continues that it teaches only one variation of distributed computing systems related to using priority. (*Id.*).

As the Board recognized earlier in the Final Written Decision, *Saito* discloses a specific distributed computing architecture in which a plurality of computers that differ from each other in terms of performance, load, and type, and uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of "urgency" or "time limit." (APPX0014-15). All disclosures in *Saito* are

tied to the use of priority schemes for distributing programs, including its discussion of the prior art distributed systems. (*E.g.*, APPX0796 at 1:10-3:29). At best, *Saito* only gives a general guidance as to the form of the claimed invention to try but this is insufficient to support an obviousness finding. *ActiveVideo*, 694 F.3d at 1328; *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation*, 676 F.3d 1063, 1073 (Fed.Cir. 2012).

(1) Why Combine *Ziff* and *Saito* When *Saito* Discloses Determining Priority and Urgency for Program Execution on Disparate Computers in a Distributed Computer System that is Irrelevant to the Single Server System in *Ziff*?

With the specific priority and urgency based distributed architecture disclosed in *Saito*, why would a POSITA modify *Ziff* using *Saito*? *Saito* does not provide any guidance toward the particular distributed computer architecture required by claim 1 of the '576 patent. *Virtek*, 97 F.4th at 887; *ActiveVideo*, 694 F.3d at 1328; *Cyclobenzaprine*, 676 F.3d at 1073.

The Board found that "increasing speed and efficiency are valid reasons for modifying Ziff's system." (APPX0023). The Board contended that there were "*substantial* citations to the record and testimonial support of [ ] expert, Dr. Neuman, that a skilled artisan 'would have understood that utilizing Saito's distributed processor system to execute Ziff's software subsystems would have allowed each subsystem to operate independently in a manner that increases parallelism, speed,

and efficiency.'" (APPX0022). However, the issue is not whether there is a general benefit to distributed processor systems, because there are many different types of distributed processor system architectures that may or may not provide benefits in many systems. As this Court recently held, "[t]he mere fact that these possible arrangements existed in the prior art does not provide a reason that a skilled artisan would have substituted" one configuration for another. *Virtek*, 97 F.4th at 887. Here, like in *Virtek*, Petitioner only argued that distributed systems were well-known but failed to "articulate[] any reason to substitute one for another or any advantages that would flow from doing so." (APPX0025). Like in *Virtek*, this Court should similarly reject this motivation to combine here. *Virtek*, 97 F.4th at 887; *also ActiveVideo*, 694 F.3d at 1327 (a statement that "a person of ordinary skill in the art would have known, based on the 'modular' nature of the claimed components, how to combine any of a number of references to achieve the claimed inventions" "is not sufficient and is fraught with hindsight bias.").

Moreover, despite Petitioner and the Board contending that distributed computing systems were used in the art for decades and well-known before the claimed invention, (APPX0669; APPX0025), neither the Board nor the Petitioner identify any prior art that used the specific distributed computing system architecture as required in claim 1. There is nothing in the prior art to suggest that a POSITA would have chosen the specific distributed computing system architecture required

in claim 1, rather than the specific distributed computing system architecture disclosed in *Saito*. *Virtek*, 97 F.4th at 887; *ActiveVideo*, 694 F.3d at 1328; *Cyclobenzaprine*, 676 F.3d at 1073.

Turning to *Saito*, *Saito's* distributed computer system architecture is not about increasing speed and efficiency by using distributed architecture instead of a single CPU system. *Saito* is also not a general disclosure of distributed architectures and their various benefits. Rather, *Saito* addresses the issue of how to improve a distributed computing system having a plurality of computers that differ from each other in terms of performance, load, and type. (APPX0759 at Abstract; APPX0796 at 3:59-64). This is how the Board described the distributed computer system architecture disclosed in *Saito*. (APPX0014-15). *Saito* therefore provides no benefit that could be used to improve the single server system in *Ziff* so there is no motivation to combine. (APPX2367-68 (¶¶63-64)); *InTouch*, 751 F.3d at 1352.

(2) If Priority-Based Allocations of *Saito* are Not Relevant to the Combination, What Benefit Could *Saito* Provide to *Ziff*?

In response to VCA's contention that the "Petitioner fails to adequately explain why the resulting distributed multi-processor system would have the precise arrangement and correspondence between three particular subsystems," the Board found that a POSITA would have modified *Ziff* so that different subsystems use their own separate processors "based on Saito's teaching of a distributed system with

multiple processors." (APPX0024). The Board adopted Petitioner's argument that the "priority-based allocation teachings [of *Saito*] are not a part of the proposed combination." (APPX0321). Except *Saito* does not teach different subsystems using their own separate processors.

Saito teaches a distributed system in which "each user of the distributed computing system instructs ***any*** of the computers included in the distributed computing system to newly run his or her user program or instructs the system to execute a previously existing program by inputting data through an input means." (APPX0800 at 11:7-12 (emphasis added); *also* APPX0796 at 3:59-64). The distribution of the programs on computers is therefore arbitrary and not predictable until the decision to select a computer is made. (APPX2367 (¶62)). If the selected computer does not already have the program to be executed on it, the program is sent to the computer. (APPX0805-6 at 22:52-23:2). In *Saito*, any computer could therefore have any or all programs at any time. A POSITA reading *Saito* would therefore understand that selection of the computer for execution of a particular program is not preselected based on content of the program but is instead selected based on the priority and urgency for execution of the program along with the available resources of the selected computer. (APPX2363-64 (¶49)).

Despite the Board describing *Saito*'s distributed computing system as a "plurality of computers that differ from each other in terms of performance, load,

and type, and uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of 'urgency' or 'time limit,'" the Board discards that system and instead finds "the allocations in Saito can be specifically determined by a user, particularly given that… *distributed computing was well-known which specifically included 'the concept of using multiple processes for receiving, storing, and editing submissions, content, or data files on separate computer components to facilitate distribution*.'" (APPX0025). In other words, the Board held that *Ziff* in view of only generally known distributed systems renders claim 1 of the '576 patent obvious without the need for *Saito*. (*Id.*). However, again, despite distributed systems being used for decades, there is no prior art of record using the specific architecture claimed in the '576 patent nor any explanation for why a POSITA would design the specific architecture claims in the '576 patent rather than following the distributed computing architecture disclosed in *Saito*. *Virtek*, 97 F.4th at 886; *InTouch*, 751 F.3d at 1352; *Cyclobenzaprine*, 676 F.3d at 1073.

Furthermore, as would also be understood by a POSITA, *Ziff*'s applications are only configured for operation on a single server with a single CPU and to communicate with and control only one local server database. (APPX2366 (¶58), APPX2368 (¶65)). On the other hand, *Saito* does not disclose how software would communicate with a remote content database. (APPX2369 (¶67)). A POSITA would have therefore considered the suggestion to eliminate the central server

teaching of *Ziff* in favor of distributing the operation of applications to other servers and computers in *Saito* as incompatible with *Ziff*. (APPX2368 (¶64)).

(3) The General Benefits of Distributed Computing Systems Do Not Provide a Motivation to Combine *Ziff* and *Saito*

Petitioner also contended that one motivation to combine *Ziff* and *Saito* would be that "[i]n a global file system, distribution is the first line of defense against overloading file servers," which refers to file distribution. (APPX0674 (¶65); APPX2365 (¶55)). Petitioner describes this benefit as "spreading information across multiple systems [and] reducing the number of system requests to each system...." (APPX0670-71 (¶46)). However, even if general benefits of distributed computing are considered, distributing information and files across multiple systems runs contrary to the claimed ***centralized*** database that is included in a specific subsystem as required by claim 1 of the '576 patent. (APPX0130 at 39:25-29, APPX2365-66 (¶¶55-56)).

Furthermore, neither *Ziff* nor *Saito* are concerned with overloading servers with file distribution. (APPX2362 (¶44)). *Ziff* discloses a single centralized server to track the story creation process that is more easily managed, robust, compatible with existing systems and networks to optimize the speed, reliability, accuracy and data control of the system. (APPX2362 (¶44); APPX0752 at 2:45-57; APPX0753 at 3:28-46; APPX0754 at 5:19-48; APPX0755 at 7:12-17). *Saito* discloses

distribution of the execution of programs among multiple computers based on the priority and urgency of the programs as well as the availability of computation resources of the various computers. (APPX0800 at 11:24-64). *Saito* does not disclose distributing content data between computers and therefore has no such concern, and there is also no discussion in *Saito* of the load on the network. Concern with overloading servers with file distribution would not provide any motivation to combine *Ziff* and *Saito*. (APPX2362 (¶44)). To the extent there is a concern with *Ziff* and *Saito* over overloading file servers with file distribution, that would teach away from the centralized database or sets of databases as part of a first server subsystem along used in connection with plural other distributed server subsystems as claimed in the '576 Patent. (APPX2365 (¶55)).

As a result, there is no motivation to combine *Ziff* and *Saito* because the distributed computing architecture in *Saito* could not be combined with *Ziff* to provide any benefit.

2. Even if *Ziff* and *Saito* are Combined, They Do Not Render Obvious the Claimed Invention

For all the pomp and circumstance of relying on *Saito* for a distributed computing system architecture, the entirety of the Board's obviousness analysis of claim 1 cites only *once* to a disclosure in *Saito*. (APPX0036). That one citation is for the purpose of stating that "Saito expressly teaches the benefit in distributed computer systems of being able to utilize distributed processors to take advantage of

different computers' 'performance, load, and type.'" (APPX0036 (*citing* APPX0796 at 3:36-49). The Board does not find that *Saito* discloses the specific distributed system in claim 1 requiring separate "server subsystems" each with its own "data processing apparatus" and specifically configured operations, or a centralized "database." As explained below, combining *Ziff* and *Saito*[1] does not satisfy all limitation or render the claims obvious.

a) Neither *Ziff* nor *Saito* Disclose the Specific Distributed Architecture Required by the Claims

The weakness of combining *Ziff* and *Saito* is that even if they are combined, the combination does not arrive at the claimed invention. Claim 1, with the pertinent subsystems and centralized database highlighted, provides:

> 1. A computer-based system for generating multimedia content comprising:
>
> (a) an electronic media submissions **server subsystem** including:
>
> (1) one or more **data processing apparatus**,
>
> (2) one or more **database** stored on a non-transitory medium; and
>
> (3) a submissions electronic interface **configured to** receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user

[1] With respect to the analysis of claim 1 of the '576 Patent, the Final Written Decision only relies on *Ferrel* for teaching a timestamp. (APPX0041-42). The Board does not rely on *Ferrel* for teaching distributed systems or databases, or any other limitation in claim 1. *Ferrel* will be addressed separately in Section V.C.

of the plurality of users, where the second user is not the first user,

wherein the first electronic media submission includes:

(i) data identifying the first user,

(ii) data identifying date and time associated with receipt of the first electronic media submission, and

(iii) data indicating content of the first electronic media submission;

(b) the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein;

(c) an electronic multimedia creator **server subsystem** operatively coupled to the electronic media submissions server subsystem, including:

(1) one or more second data processing apparatus, and

(2) an electronic content filter **configured to** apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user,

wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content; and

(d) an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more **third data processing apparatus** and **configured to** make the multimedia content electronically available for viewing on a plurality of user devices.

As this highlighted version illustrates, claim 1 of the '576 Patent requires at least three separate "server subsystems" each with its own "data processing apparatus" and specifically configured operations, and a centralized "database."

(1) *Ziff* does not teach separate applications suitable to run on separate processors

It is undisputed that *Ziff* does ***not*** have separate subsystems, but instead *Ziff* merely teaches using a single, central, processing server 22 with a single CPU. (APPX0754 at 5:19-33, 6:29-44; APPX0168-69; APPX0679 (¶80); APPX2360-62 (¶¶38, 41, 43, 45), APPX2368 (¶64); APPX0277-79). As Petitioner's expert admitted, "a POSITA would have understood that Ziff does not teach a distributed system because Ziff's multiple software applications are executed on the same server." (APPX0679 (¶80)). Petitioner further conceded that "Ziff expressly teaches its subsystems, while distinct, are executed on the same CPU. Ziff, 6:37–41." (APPX0155) (emphasis added). Furthermore, each "subsystem" in claim 1 requires functionality ***and*** "one or more [first/second/third] data processing apparatus." (APPX0130 at 39:25-27, 48-51, 62-67). Software cannot be a subsystem under the plain reading of the claim language unless each functionality is associated with a different data processing apparatus. Yet, *Ziff* discloses all software sharing the same server hardware. (APPX0679 (¶80); APPX2366 (¶58), APPX2368 (¶65). A POSITA would therefore understand that *Ziff* does not disclose subsystems because applications are different functionality and in *Ziff* each application is not associated with a different data processing apparatus. APPX2366(¶58), APPX2368 (¶65)).

Furthermore, *Ziff* does not disclose applications on separate dedicated hardware. APPX0679 (¶80); APPX2366((¶58)). As also acknowledged by

Petitioner's expert, *Ziff* discloses only a single database accessible only by the programs on the same server as the database. (APXP0679 (¶79)). Although Petitioner argues that *Ziff* contemplates breaking up the story creation process into separate applications suitable to run on separate processors, they rely solely on *Ziff*'s statement that the "system may include ***a server*** which is executing one or more software applications which implement various steps in the story creation process." (APPX0312 (APPX2174-75 (¶13)) (*quoting* APPX0753 at 3:28–40))(emphasis added). However, this statement once again points to the importance of this central server handling the entirety of this single controlled process of "story creation." Asserting that the software applications running on this server may work together to enable the "various steps" does not teach that respective steps might instead be carried out on different respective hardware from each other, let alone separate dedicated hardware. Nor is *Ziff* teaching that each of these "various steps" are carried out by different software applications, as opposed to the applications functioning cooperatively on each of these "various steps" (and, as disclosed in *Ziff*, on a single server). (*See also* APPX02360-61 (¶¶39-43), APPX2363 (¶46)). For *Ziff* in view of *Saito* to render claim 1 obvious, at a minimum *Saito* must disclose subsystems of specific processors dedicated to specific applications and that the distributed applications executing on different processors can access a centralized database. *Saito* does not disclose either one.

(2) *Saito* Does Not Disclose Subsystems of Specific Processors Dedicated to Specific Application as Required by Claim 1

As explained above, *Saito* discloses the selection of a specific computer for execution of a particular program based on a function of priority, urgency, and availability of computation resources. (*E.g., supra* §III.A.2). The selection of a computer for a program in *Saito* is arbitrary and unpredictable until the information is considered when a decision is made at the time of selection, and the selection is not based on content for the programs. (*Supra* §III.A.2; APPX0799 at 10:40-44; APPX2363-64 (¶¶49, 52)). As *Saito* discloses: "The number of user programs and how to locate them to the respective computers may be arbitrarily determined by the user." (APPX0799 at 10:40-44). *Saito* therefore does not disclose specific processors dedicated to specific applications and instead discloses an arbitrary and unpredictable distribution of programs. (APPX0674 (¶63)).

Petitioner's expert describes this aspect of *Saito* as "teach[ing] flexibility in the system" because the applications can be moved around. (APPX0682 (¶91)). However, the '576 Patent requires processors for specific subsystems, (APPX0130 at 39:25-29, 48-55, 62-67), not an arbitrary or flexible distribution of applications to different and changing processors depending on priority and urgency. The '576 Patent explains that the benefit of the subsystems on separate assigned processors makes the system "less prone to catastrophic hardware failures affecting the entire

system." (APPX0115 at 10:4-12). On the other hand, *Saito* discloses the same program operating on multiple computers simultaneously and does not disclose any required correlation between the number of programs and the number of processing apparatus. (APPX0807 at 26:33-38, APPX0799 at 10:15-17, 40-44). *Saito*'s approach of arbitrary and unpredictable distribution of applications across multiple computers would therefore make the *Saito* system more prone to catastrophic hardware failure. Selecting a computer solely based on whether it is already executing a particular program would ignore the purpose and teachings of *Saito* which states that using priority, urgency, and availability of computation resources as a selection method is required to "realize more strict real-time characteristics in a distributed computing system." (APPX0796 at 3:32-41).

(3) Merely adding more CPUs does not arrive at the claimed invention

Petitioner further argued that a POSITA would add more CPUs to complete stories faster and accommodate more users, and that "Ziff's 2:45-57 disclosure that its 'system integrates the various story creation processes into a single controlled process' and is 'robust, compatible with other existing systems and networks and [is] very flexible" fails to teach away and instead encourages the proposed combination. (APPX0311-12 (citing APPX2171-74 (¶¶10-12)). This analysis is flawed.

Multiple CPUs do not equate to multiple CPUs each dedicated to a particular subsystem as required by the claims. *Virtek*, 97 F.4th at 886; *InTouch*, 751 F.3d at 1352. The concept of "adding more CPUs" is not enough to fill the gap between *Ziff* and the claimed invention. *Saito* would teach adding more general CPUs that are not specifically configurable. That is not the invention. Thus, this general guidance is insufficient to support an obviousness holding. *Virtek*, 97 F.4th at 886; *InTouch*, 751 F.3d at 1352; *Cyclobenzaprine*, 676 F.3d at 1073.

Indeed, Petitioner's analysis ignores that merely adding more CPUs to the single processing server 22 to better handle more users does not teach the claimed distributed computing system structure, since all these CPUs would remain dedicated to the "single controlled process," and not to separate subsystems thereof. Even supposing, as Petitioner's expert conjectures, and contrary to *Ziff*'s teachings of single processing server 22, that the CPUs might be distributed along a LAN, these CPUs would still remain dedicated to the "single controlled process," not to each handling being dedicated to different "software components" or "subsystems" of *Ziff*.

b) Neither *Ziff* nor *Saito* Disclose Distributed Software Using a Centralized Database as Required by Claim 1

Even if *Ziff* and *Saito* could be combined to create the distributed subsystems in which separate applications were distributed to separate dedicated processors as required by claim 1 (despite the unlikelihood and arbitrariness of that occurrence as

explained above), there is no disclosure in *Ziff* and *Saito* for such distributed applications accessing a centralized database. (APPX2370-71 (¶73)).

(1) Petitioner Expert Agreed that *Ziff* Only Discloses a Single Server with a Database

Petitioner's expert agreed that *Ziff* only teaches applications operating and communicating with a database when they are located on the same local server. (APPX0679 (¶¶79-80)). *Ziff* does not disclose how the applications would communicate with the database on a local server if the applications were moved off-server to different processing apparatuses such that the database is no longer local. (APPX2370-71 (¶73)).

(2) No One Argued that *Saito* Discloses a Centralized Database that is Part of One Subsystem

Neither Petitioner, Petitioner's expert, nor the Board contend that *Saito* discloses distributed processors that access a centralized database. (APPX0152-54, APPX0680-83; APPX0014-15; APPX0036-38). In *Saito*, each computer has its own external storage unit 123, main storage unit 121, and terminal 124 for input and output. (APPX0799 at 10:28-31). There is no disclosure in *Saito* of the separate computers accessing a centralized database for data content, nor that the programs executed on the separate computers could access a centralized database for data content. Instead, *Saito* discloses only one database: a "program location database" for storing "either priority levels or urgency levels of programs performing the same

operation and the identifiers of computers on which those programs are run," not content data. (APPX0798 at 7:46-49). The "program location database" disclosed in *Saito* is only accessed by the computer on which the database is found to manage the distribution and priority of programs, not for shared content data. (APPX0807 at 26:44-53).

Based on these teachings of *Saito*, a POSITA would choose to incorporate relevant data from the database as part of the program executable transmitted to a second remote computer, such that the relevant operations could be performed locally at that remote computer rather than having to remotely access a centralized database. (APPX2370-71 (¶73)). This is the only combination that is consistent with the central teachings of *Ziff* as to the operation of its software on the same server as the data. (*Id.*). A POSITA combining *Ziff* and *Saito* would therefore not result in a system having "an electronic media submissions server subsystem including… one or more database stored on a non-transitory medium" and "an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including… an electronic content filter configured to [. . .] obtain a plurality of electronic media submissions from the one or more database . . .." (APPX2370-71 (¶73)).

(3) The Board Did Not Cite Any Evidence Supporting Distributed Processors Accessing a Centralized Database

VCA argued that "Saito also does not disclose applications distributed to different processors that access a centralized database." (APPX0289). The Board responded that "[n]onobviousness cannot be established by attacking references individually where the unpatentability challenge is based upon the teachings of a combination of references." (APPX0037). Then the Board points to Petitioner's brief and Petitioner's expert, neither of which explain how the combination of *Ziff* and *Saito* disclose applications distributed to different processors that access a centralized database.

The Board first points to Petitioner's brief where "Petitioner proposes to modify Ziff based on Saito's teachings for the purpose of improving speed and efficiency." (APPX0037 (*citing* APPX0171-73)). The portion of Petitioner's brief cited by the Board argued *Saito* teaches "distributed processor system for cooperatively executing a plurality of disparate programs" (APPX0172) and that *Ziff* teaches a database for information (APPX0173), but never argues that the combination teaches applications distributed to different processors *access a centralized database*. Notably, the Board does not contend that Petitioner ever argued that *Ziff* and *Saito* disclosed applications distributed to different processors that access a centralized database. The Board also cited page 25 of Petitioner's reply,

however, again there is no analysis regarding databases. (APPX0037 (*citing* APPX0332)).

Then the Board points to Petitioner's expert as supporting the finding "that a skilled artisan would have been motivated to combine *Ziff* and *Saito* to arrive at the claimed features," but again the Board does not refer to databases. (APPX0037-38). Rather than referring to any portion of the declarations of Petitioner's expert, the Board points to an earlier section in the Final Written Decision. (APPX00038 (Section II.D.4)). Yet, that section never addresses whether *Ziff* combined with *Saito* discloses applications distributed to different processors that access a centralized database. (*See* APPX0015-27). In that section, there is no discussion of a centralized database, or any databases. The Board acknowledged PO's argument that *Ziff* combined with *Saito* does not disclose "the specific configuration of subsystems with a centralized database" in claim 1 of the '576 patent (APPX0021), but the Board's response only discusses general distributed systems without stating how the combination of *Ziff* and *Saito* discloses applications distributed to different processors that access a centralized database. (APPX0022-27). In sum, the Board has no support for its finding that *Ziff* combined with *Saito* discloses applications distributed to different processors that access a centralized database as required by claim 1 of the '576 patent.

C. Combining *Ziff-Saito* with *Ferrel* Would Not Have Been Obvious Because None of the References Disclose Searching by Submission Time

Another error in the Final Written Decision is the combination of *Ziff* and *Saito* further combined with *Ferrel*, which is relevant to two limitations. Claim 1 requires "the first electronic media submission includes:… data identifying date and time associated with receipt of the first electronic media submission" and claim 12 requires "the electronic filter applies criteria identifying a media submission's time of submission." (APPX0130 at 39:40-42, 40:33-35). Even assuming *arguendo* that a POSITA were to successfully combine the teachings of *Ziff* and *Saito* to create the claimed distributed subsystems required by claim 1, combining *Ferrel* with *Ziff-Saito* does not teach the time limitations in claim 1 and 12. (APPX2371-73 (¶¶75-81)).

Nowhere in *Ziff* is there a teaching of recording or storing submission time (or any time) for any purpose. *Ziff* only discloses using a date. (APPX0753 at 3:54–58, 4:37–39; APPX0756 at 9:6–29; APPX0733 at Fig. 4A). Petitioner's expert agrees that *Ziff* only stores submission date and not submission time. (APPX0691-92 (¶¶116-117) (*citing* APPX0753 at 3:54–58, 4:37–39; APPX0756 at 9:6–29; APPX0733 at Fig. 4A)).

Ferrel expressly teaches searching by *publication* time, not searching by submission time. (APPX2371 (¶76)). As stated in *Ferrel*, "The user may limit the

articles retrieved by the Find dialog to those ***published*** on a given day or within a range of time." (APPX0866 at 40:47-49) (emphasis added). *Ferrel* does not disclose using the received time for searches, nor does *Ferrel* disclose that the receiving time is relevant or used for any purpose. (*Id.* at 40:43-49). The Board agreed with VCA that Petitioner's expert cited *Ferrel* for teaching searching by publication time. (APPX0031).

Despite *Ziff* not teaching storing a submission time nor *Ferrel* teaching searching by submission time, the Board concludes that it would have been obvious to store the publication time and then search by it. (APPX0031). The Board cites to Petitioner's expert for the conclusion that "a POSITA would have understood that *Ferrel*'s timestamp could easily be implemented into *Ziff*'s submission subsystem." (APPX0031 (*citing* APPX0694 (¶121)). Yet, combining *Ziff* with *Ferrel* would result in searching by publication time, not submission time. Neither reference provides any reason to modify *Ziff* to store submission time and then modify *Ferrel* to search by submission time. The Board points to paragraph 10 and 11 of Petitioner's Supplemental Declaration to support that "the teachings of Ziff and Ferrel would have led a skilled artisan to use submission time." (APPX0032 (*citing* APPX2171-72 (¶¶10, 11))). However, neither of those paragraphs discuss submission time and are irrelevant to the Board's finding on time. (APPX2171-72 (¶¶10, 11)).

Petitioner's expert incorrectly contends that updating the status page in *Ziff* necessarily requires time stamping with a submission time. (APPX0692-93 (¶118)). However, as explained above, Petitioner's expert agreed that *Ziff* only discloses using a date. (APPX0691-92 (¶¶116-117); APPX0753 at 3:54–58, 4:37–39; APPX0756 at 9:6–29; APPX0733 at Fig. 4A). In view of the disclosures in *Ziff*, a POSITA would understand the updating of the *Ziff* status page to simply update the contents, not update the submission time. (APPX2371-72(¶77)). *Ferrel* does not fill in the lack of disclosure in *Ziff*. (*Id.*).

Petitioner's expert jumps to an unsupported conclusion by speculating that "using a timestamp such as *Ferrel*'s, which stores the submission time as well as the submission date, would have been one common way to implement *Ziff*'s 'predetermined time period.'" (APPX0692-93 (¶118)). As explained above, neither *Ferrel* nor *Ziff* disclose using a submission time for any purpose. There is no rational explanation for using a timestamp of submission for resetting the "predetermined time period" in *Ziff* when *Ferrel* teaches that the only time data relevant to showing content to a user is the *publication* time, not the submission time. (APPX0866 at 40:43-49; APPX2372 (¶79)). There is no teaching in *Ferrel* that submission time is a useful time for searching, nor is there any showing by Petitioner that a user would want to search based on submission time at the time of the invention. (APPX2372 (¶79)).

Furthermore, it is not a sufficient motivation for combining searching by submission time (which is not disclosed by any reference identified by Petitioner) by speculating that allowing for more options to sort submissions. (APPX2372-73 (¶80)). Such a speculative motivation would add substantial complexity of using and searching the system without any showing that a user would want to search at such a level of granularity. (*Id.*). *Ziff* does not need to search by such data because it has many other data points associated with the submission by which searches could be performed. (*Id.*). Instead, a POSITA would recognized that a simpler solution than using granular submission time would be assigning each submission a sequential identifier, which was well known in the art, and which would have guaranteed uniqueness between submissions with respect to the order of submission. (*Id.*).

A user searching content multiple times in one day is also not an explanation for why a search based on submission time would be needed to locate new submission to avoid redundant reviews. A POSITA solving this problem would use a simpler solution of automatically marking (or allowing a user to mark) previously viewed content to avoid redundant reviews. (APPX2373 (¶81)). Combining *Ziff-Saito* and *Ferrel* therefore fails to disclose the limitations "the first electronic media submission includes:… data identifying date and time associated with receipt of the first electronic media submission" in claim 1 and "the electronic filter applies criteria

identifying a media submission's time of submission" in claim 12. (APPX0130 at 39:40-42, 40:33-35; APPX2373 (¶¶81-82)).

D. Without Any Combination of the Prior Art Disclosing the Specific Distributed Computing Architecture of the Claimed Invention, the Centralized Database, or Storing and Searching by Submission Time, the Board Improperly Used the Claimed Invention as a Roadmap for the Obviousness Analysis

At best, the Board's decision is an improper hindsight analysis using the claimed invention as a roadmap for the obviousness analysis. *Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed.Cir. 2012); *InTouch*, 751 F.3d at 1351-52. A combination of *Ziff* and *Saito* does not arrive at the claimed distributed computing system architecture in claim 1 requiring specific applications distributed to specific different processors that access a centralized database. The Board only cites generic assertions by Petitioner's expert for why there are general benefits to using distributed systems to further modify *Saito* to reach the claimed architecture, which is irrelevant to the specific claimed distributed computing architecture versus other distributed architectures including *Saito*. (APPX0024-26; APPX0036). This generic argument "bears no relation to any specific combination" of the prior art and is insufficient to support an obviousness holding. *ActiveVideo*, 694 F.3d at 1328. As the Supreme Court held, "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements ***in the way the claimed new invention does***… because inventions in most, if not all,

instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-419 (2007) (emphasis added). There is no evidence to support that the prior art would be combined to reach the specific distributed computing architecture ***in the way the claimed invention does*** versus the distributed computing architecture disclosed in *Saito* or any other distributed computing architecture without improper hindsight bias and therefore the obviousness determination cannot stand. *ActiveVideo*, 694 F.3d at 1328; *InTouch*, 751 F.3d at 1351 ("It appears that Dr. Yanco relied on the '357 patent itself as her roadmap for putting what she referred to as pieces of a 'jigsaw puzzle' together.").

And the further combination of *Ferrel* would not search by submission time. The only way that such a system architecture could be arrived at is by using the claimed invention as the basis for determining how to improve *Ziff*, which is not an appropriate analysis. *ActiveVideo*, 694 F.3d at 1328; *InTouch*, 751 F.3d at 1351; *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed.Cir. 1998) ("Determination of obviousness can not be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention."). Without using the claimed invention as a roadmap, there is no way to explain how a combination of *Ziff*, *Saito*, and *Ferrel* would render claim 1 of the '576 patent and the challenged dependent claims obvious.

Ziff, *Saito*, and *Ferrel* alone and in combination therefore fail to disclose:

- "an electronic media submissions server subsystem including . . . one more data processing apparatus [and] one or more database stored on a non-transitory medium"
- "an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including [] one or more second data processing apparatus, and [] an electronic content filter configured to [. . .] obtain a plurality of electronic media submissions from the one or more database . . .," and
- "an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices."

(APPX2366-67 (¶¶59-61)). And, furthermore, combining *Ziff*, *Saito*, and *Ferrel* fail to disclose the limitations "the first electronic media submission includes:… data identifying date and time associated with receipt of the first electronic media submission" in claim 1 and "the electronic filter applies criteria identifying a media submission's time of submission" in claim 12. (APPX0130 at 39:40-42, 40:33-35; APPX2373 (¶¶81-82)). Therefore, there is a lack of substantial evidence to support

a holding that claim 1 and dependent claims 2, 4–7, 10–12, 15, 16, 21, and 22 of U.S. Patent No. 10,339,576 are obvious should therefore be reversed.

CONCLUSION

Appellant Virtual Creative Artists LLC respectfully requests that this Court reverse the holding of obviousness of claim 1 and dependent claims 2, 4–7, 10–12, 15, 16, 21, and 22 of U.S. Patent No. 10,339,576.

Dated: August 12, 2024

Respectfully submitted,

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ADDENDUM

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Paper 26
Date: February 9, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

VIRTUAL CREATIVE ARTISTS, LLC,
Patent Owner.

IPR2022-01263
Patent 10,339,576 B2

Before KEVIN W. CHERRY, MICHAEL L. WOODS, and SEAN P. O'HANLON, *Administrative Patent Judges.*

WOODS, *Administrative Patent Judge.*

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Petitioner, Unified Patents, LLC, filed a Petition (Paper 1, "Pet.") requesting *inter partes* review of claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 ("the Challenged Claims") of U.S. Patent No. 10,339,576 B2 (Ex. 1001, "the '576 patent"). *See* Pet. 1. We issued a decision to institute an *inter partes* review of these claims. Paper 4 ("Institution Decision" or "Inst. Dec.").

Patent Owner, Virtual Creative Artists, LLC, filed a Patent Owner Response (Paper 10, "PO Resp."), to which Petitioner filed a Reply (Paper 17, "Reply" or "Pet. Reply"), and to which Patent Owner filed a Sur-Reply (Paper 18, "Sur-Reply" or "PO Sur-Reply").

Oral argument was held on December 14, 2023, and the transcript of the hearing has been entered as Paper 25.

We have jurisdiction under 35 U.S.C. § 6. Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2019). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 of the '576 patent are unpatentable.

A. Related Proceedings

The parties identify the following matters as related:

- *Virtual Creative Artists, LLC v. Meta Platforms, Inc. f/k/a Facebook, Inc.*, 6:22-cv-00265 (W.D. Tex.) (Pet. 89);
- *Virtual Creative Artists, LLC v. Bumble Trading, LLC*, 6:230cv-00675 (W.D. Tex.) (Pet. Reply 31)[1];
- *Virtual Creative Artists, LLC v. TikTok Inc.*, 1:23-cv-05405 (N.D. Ill.) (Pet. Reply 31);
- *Virtual Creative Artists, LLC v. Snap Inc.*, 1:23-cv-04862 (N.D. Ill.) (Pet. Reply 31);
- *Virtual Creative Artists, LLC v. Pinterest, Inc.*, 1:23-cv-04238 (N.D. Ill.) (Pet. 89);
- *Virtual Creative Artists, LLC v. Twitter, Inc.*, 1:22-cv-6890 (N.D. Ill) (Paper 6, 1);
- *Virtual Creative Artists, LLC v. Pandora Media, LLC*, 1:23-cv-2671 (N.D. Ill.) (Paper 6, 1);
- *Virtual Creative Artists, LLC v. Google LLC*, 6:23-cv-197 (W.D. Tx.) (Paper 6, 1);
- *Virtual Creative Artists, LLC v. LinkedIn Corporation*, 1:23-cv-3172 (N.D. Ill.) (Paper 6, 1).

The parties are reminded of their continuing obligation to update their mandatory notice information "within 21 days of a change of the information." 37 C.F.R. § 42.8(a)(3).

B. Real Parties In Interest

Petitioner submits that itself, Unified Patents, LLC, is the sole real-party-in-interest. Pet. 89.

Patent Owner submits that itself, Virtual Creative Artists, LLC, is the sole real-party-in-interest. PO Resp. 30.

[1] We resume page numbering after page 26, as pages 27–31 of Petitioner's Reply are unnumbered.

C. The '576 Patent (Ex. 1001)

The '576 patent is titled "Revenue-Generating Electronic Multi-Media Exchange and Process of Operating Same." Ex. 1001, code (54). The '576 patent describes a distributed process for creating media content based upon submissions received on an electronic multimedia exchange. *Id.* at 1:22–25. The '576 patent states, "the scope of the invention is applicable to all forms of media whether printed, broadcast, projected or performed." *Id.* at 6:14–16, 1:20–22.

The '576 patent explains that within "a process for creating media content, media submissions are requested and electronically received from end users and stored in a computer database." Ex. 1001, code (57). "[These] submissions are searched for material to be included in the media content, and cross-checked against the other submissions for originality and timeliness." *Id.* "After the material is selected from one or more submissions, the content is developed and released to an audience for review." *Id.* "The end users whose submission material was included in the released content are rewarded." *Id.* "In one embodiment, third parties are permitted to access and search the submissions on an open exchange," in which "[t]he third parties can bid for rights." *Id.* The bids are then "forwarded to the particular submission's end user for acceptance or rejection." *Id.* "Appropriate billing and payment processes are used to bill and pay the parties involved." *Id.*

The '576 patent purports to address the following problems: the need for media end users to interact with media creators to develop creative submissions, which may be used in media content; and the need for an open

exchange where submitted media works can be searched and viewed for use and purchase by third parties. *See* Ex. 1001, 3:3–15.

The Challenged Claims are directed to a computer-based system for generating multimedia content using three distributed processing subsystems. *See* Ex. 1001, 39:22–41:6. These three subsystems are: (1) an "electronic media submissions server subsystem"; (2) an "electronic multimedia creator server subsystem"; and (3) an "electronic release subsystem"; the three of which are "operatively coupled" together. *See id.* at 39:22–67 (sole independent claim 1). The Specification describes that the submission subsystem receives content, which may be based on fill-in-the-blank submission forms, and "which may be transformed in the same form or adapted into multi-media content for distribution." *See id.* at 3:26–30, 4:5–11. The Specification further describes that the creator subsystem may allow a user to search for submitted content, select a submission, and modify and develop the submission. *See id.* at 4:27–41. The Specification further describes that the release subsystem may allow a user to view the final, developed submission. *See id.* at 4:42–45.

We reproduce Figure 1 of the '576 patent, below:

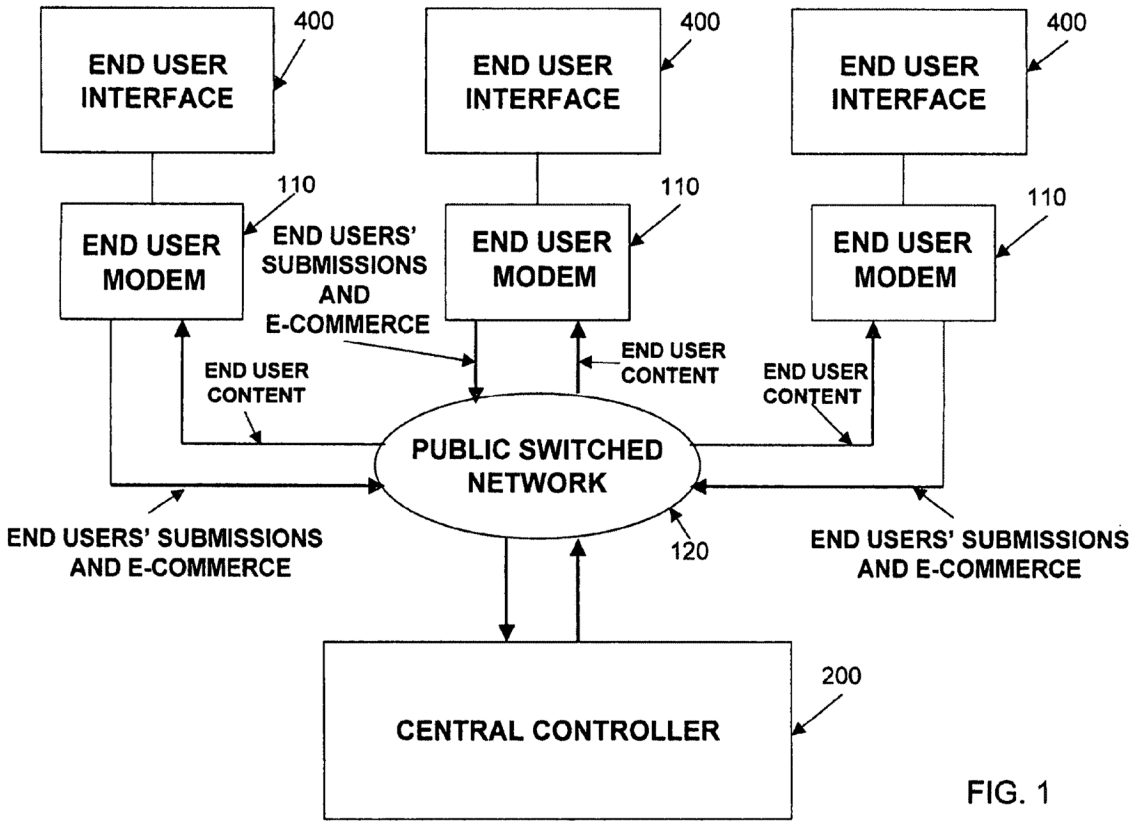

FIG. 1

Figure 1, reproduced above, is a block diagram depicting a "creator central controller electronically connected to various end user viewer interfaces via a network." Ex. 1001, 5:9–11. In particular, Figure 1 depicts central controller 200 and end user interfaces 400 (collectively referred to as the "nodes"). *Id.* at 6:30–35. Each node is typically connected to central controller 200 via the Internet, such as by modem 110, using a public switched phone network 120. *Id.* at 6:35–37. Interfaces 400 are the input and output gateways for communications with central controller 200. *Id.* at 6:41–32.

Notably, the '576 patent describes, "While the above embodiment describes a single computer acting as the central controller, *those skilled in the art will realize that the functionality can be distributed over a plurality of computers*." Ex. 1001, 9:55–58 (emphasis added).

We further reproduce Figure 3 of the '576 patent, below:

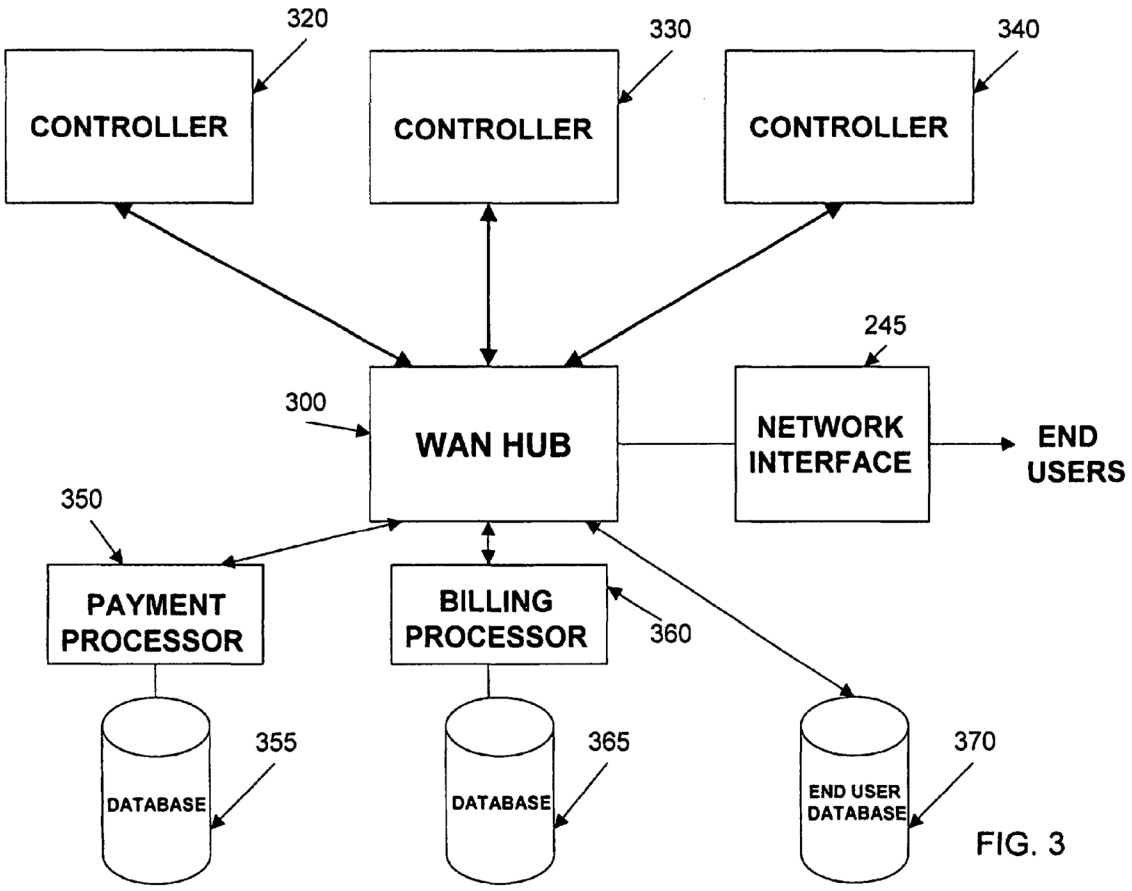

FIG. 3

Figure 3, reproduced above, is a block diagram of an *embodiment* of the central controller of Figure 1 distributed over *several servers*. Ex. 1001, 5:12–14. In this particular embodiment, *central controller 200 is configured in a distribution architecture, wherein the databases and processors are housed in separate units or locations*. *Id.* at 9:60–61. Figure 3 depicts three separate controllers (320, 330, 340) and each performs primary processing functions and each are attached to a wide-area-network, namely WAN hub 300, which serves as a communications router. *See id.* at 9:60–10:1.

D. Illustrative Claim

Of the Challenged Claims, Claim 1 is the only independent claim, which we reproduce below:[2]

1. [1(P)] A computer-based system for generating multimedia content comprising:

[1(a)] an electronic media submissions server subsystem including:

[1(a)(1)] one or more data processing apparatus,

[1(a)(2)] one or more database stored on a non-transitory medium;

[1(a)(3)] a submissions electronic interface configured to receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user of the plurality of users, where the second user is not the first user,

[1(a)(3)(i)] wherein the first electronic media submission includes: data identifying the first user,

[1(a)(3)(ii)] data identifying the date and time associated with receipt of the first electronic media submission, and

[1(a)(3)(iii)] data indicating content of the first electronic media submission

[1(b)] the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein;

[2] For ease of reference, we use Petitioner's claim numbering scheme as indicated by the bracketed numbers.

> [1(c)] an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including:
>
> > [1(c)(1)] one or more second data processing apparatus, and
> >
> > [1(c)(2)] an electronic content filter configured to apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user,
> >
> > [1(c)(3)] wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content; and
>
> [1(d)] an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices.

Ex. 1001, 39:23–67.

E. References Relied Upon

Petitioner's challenges rely on the following references (Pet. 1):

Name	Reference	Ex. No.
Ziff	US 6,557,013 B1, issued Apr. 29, 2003	1004
Saito	US 5,845,116, issued Dec. 1, 1998	1005
Ferrel	US 5,907,837, issued May 25, 1999	1006

F. Alleged Ground of Unpatentability

Petitioner contends that the Challenged Claims are unpatentable based on the following ground (Pet. 1):

Claim(s) Challenged	35 U.S.C. §[3]	Reference(s)/Basis
1, 2, 4–7, 10–12, 15, 16, 21, 22	103	Ziff, Saito, Ferrel

Petitioner supports its challenge with declarations from Dr. Clifford Neuman (Exs. 1003, 1020). *See, e.g.*, Pet. 10 (citing Ex. 1003 ¶¶ 71–74); *see also* Pet. Reply 3 (citing Ex. 1020 ¶¶ 4–20).

Patent Owner supports its Response with a declaration from Mr. Nicholas Zatkovich (Ex. 2001). *See, e.g.*, PO Resp. 3 (citing Ex. 2001 ¶ 31).

II. ANALYSIS

A. Level of Ordinary Skill in the Art

The level of ordinary skill in the art is "a prism or lens" through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). The person of ordinary skill in the art ("POSITA" or "skilled artisan") is a hypothetical person presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of ordinary skill in the art, we may consider certain factors, including the "type of problems encountered in the art; prior art solutions to those problems; rapidity with

[3] The pre-AIA version of 35 U.S.C. applies. *See* Ex. 1001, code (63) (claiming priority to a patent application filed November 16, 2012); *see also* Pet. 6 n.4 (acknowledging the same).

which innovations are made; sophistication of the technology; and educational level of active workers in the field." *Id.*

> Petitioner submits that a POSITA
>
> would have had, as of May 5, 2000, (1) at least an undergraduate degree in electrical engineering, computer science, a closely related scientific field, or similar advanced post-graduate education in this area; (2) a working knowledge of electronic content distribution systems; and (3) at least two years of experience with such systems.

Pet. 10 (citing Ex. 1003 ¶¶ 71–74). Petitioner further submits that "[a]dditional education may substitute for lesser work experience and vice-versa." *Id.*

For purposes of institution, we adopted Petitioner's level of skill. *See* Inst. Dec. 8. In the Patent Owner Response, Patent Owner does not dispute Petitioner's definition of a skilled artisan. *See* PO Resp. 4.

For purposes of this Final Written Decision, we continue to adopt Petitioner's definition of a POSITA, which is supported by the testimony of its expert and consistent with the '576 patent and cited references, and not disputed by Patent Owner. *See* Pet. 10; *see also* PO Resp. 4.

B. Claim Construction

Claim terms are generally given their ordinary and customary meaning as would be understood by one with ordinary skill in the art in the context of the specification, the prosecution history, other claims, and even extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises, although extrinsic evidence is less significant than the intrinsic record. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–1317 (Fed. Cir. 2005) (en banc).

Neither Petitioner nor Patent Owner expressly construes any claim term. *See* Pet. 10–11; *see also* PO Resp. 4. In our Institution Decision, we determined that there were no terms that require express construction for the purposes of instituting trial. Inst. Dec. 9 (citing *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017)).

For purposes of this Final Written Decision, we need not and do not expressly construe any claim term. *See Nidec*, 868 F.3d at 1017.

C. Principles of Law

"In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden never shifts to Patent Owner. *Dynamic Drinkware*, 800 F.3d at 1378.

Petitioner's challenge is based on obviousness. Pet. 1.

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and, when presented, (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

We analyze the asserted ground in accordance with these principles.

D. Asserted Unpatentability over Ziff, Saito, and Ferrel

Petitioner contends that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 are unpatentable over Ziff in view of Saito and Ferrel. Pet. 1.

1. Ziff (Ex. 1004)

Ziff is a U.S. patent titled "Story Workflow Management System and Method." Ex. 1004, code (54). Ziff describes a story creation workflow management system. *Id.* at code (57). By providing the steps "of the story creation process in a single integrated system," Ziff's system "permits the users of the system to work at different times of the day and in different geographic locations." *Id.* "The system also permits the users of the system to rapidly determine the current status of any story in the system." *Id.*

Figure 1 of Ziff is reproduced below.

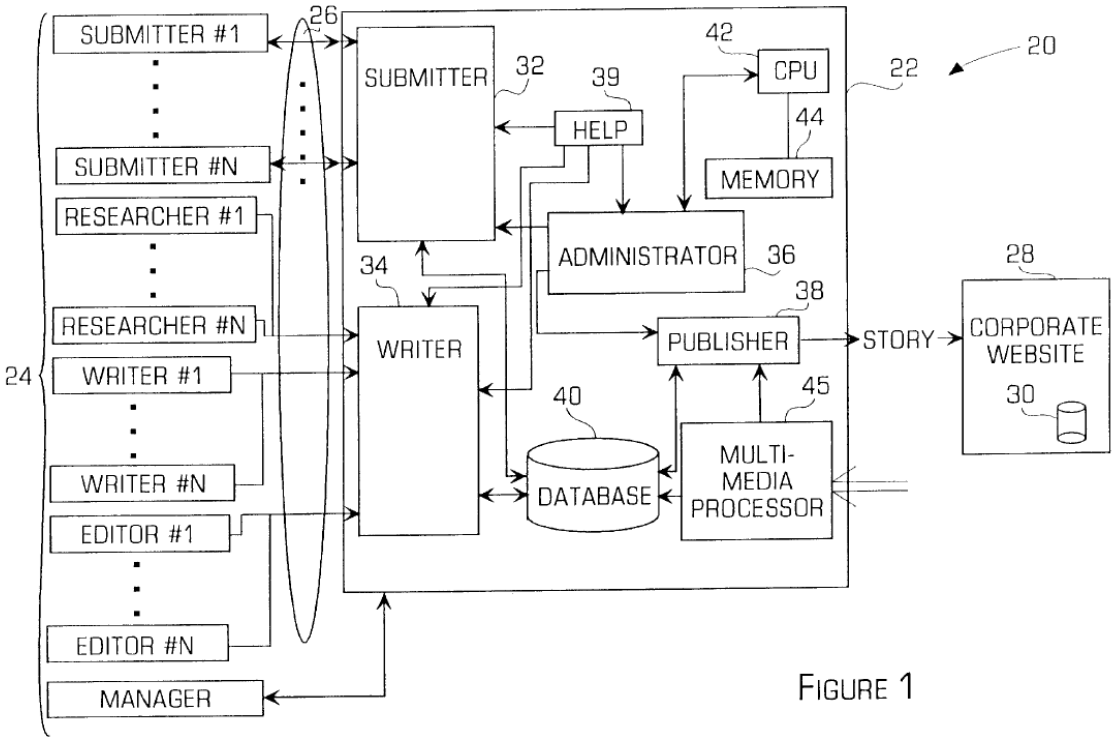

FIGURE 1

Figure 1, reproduced above, depicts a block diagram showing Ziff's story workflow management system 20. Ex. 1004, 4:31–32. As part of Ziff's system for creating media from the initial lead submission phase to creation to final publication, Ziff's system 20 contains separate subsystems, which include submission application system 32, writer system 34, and publisher system 38, as shown in Figure 1. *Id*. at 2:45–60, 5:19–24, 6:29–33. Submission application system 32 generates a user interface to gather information from a user about a story. *Id*. at 6:45–48. The submission information and data are stored in database 40 by submission application system 32. *Id*. at 6:48–50. Writer system 34 uses the stored data to create media, and publisher 38 releases finalized media. *Id*. at 6:65–7:12, 7:32–37. Ziff's subsystems, in the disclosed embodiment, are different software applications executed by CPU 42. *Id*. at 5:45–47, 6:13–17, 6:37–41.

2. Saito (Ex. 1005)

Saito is a U.S. patent titled "Distributed Computing System." Ex. 1005, code (54). Saito's invention "relates to a distributed computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs, and more particularly to the configuration and method for such a distributed computing system which utilizes priority to realize real-time characteristics." *Id.* at 1:4–9. Saito's distributed computing system has a plurality of computers that differ from each other in terms of performance, load, and type, and uniformly manages local priority schemes adapted in the respective computers by utilizing the concept of "urgency" or "time limit." *Id*. at code (57). "Each of the computers includes a priority level conversion procedure for performing a

conversion between an urgency level and a priority level of processing in accordance with the performance and the load of the computer." *Id*.

3. Ferrel (Ex. 1006)

Ferrel is a U.S. patent titled "Information Retrieval System in an On-Line Network Including Separate Content and Layout of Published Titles." Ex. 1006, code (54). Ferrel's "invention relates to information retrieval systems and more particularly, to a system and method for indexing, querying and retrieving information in an on-line network." *Id.* at 1:11–14. Ferrel discloses an "information retrieval (IR) server [that] indexes and searches stories and other content objects, such as images and sound clips, in titles in an on-line network." *Id.* at 4:2–4. Ferrel explains that "[i]ndexing takes place when a title is released to the network by a publisher workstation" and if "a content object is deleted from the network server, the IR server is notified." *Id.* at 4:4–8. Ferrel further explains that, as such, "the IR server has a current index of all the content on the network as soon as the content is published or deleted." *Id*. at 4:8–10.

4. Proposed Combination of Ziff and Saito

Petitioner submits that Ziff teaches, "the submission application system, the writer system, the security system and the publisher system may be software applications stored in the memory 44 of the server and the software applications are executed by the CPU 42 of the server." Pet. 20 (quoting Ex. 1004, 6:37–41). Petitioner further submits that Ziff also teaches that "the user may interact with the various story creation systems, which may be software applications being executed by the server," and that "each of the story creation sub-systems . . . may operate independently." *Id.*

(alteration in original) (emphasis omitted) (quoting Ex. 1004, 5:45–47, 6:13–17).

Petitioner acknowledges, however, that Ziff "does not expressly teach that each software application—which perform[s] the respective functions of Ziff's story creation subsystems—are implemented on *separate processors*. In other words, Ziff expressly teaches its subsystems, while distinct, are *executed on the same CPU*." *Id.* (citation omitted and emphasis replaced). Nevertheless, Petitioner reasons that a skilled artisan would have been motivated to "utilize the well-known benefits of a distributed processing architecture to implement Ziff's subsystems." *Id.* at 21 (citing Ex. 1003 ¶¶ 104–114) (emphasis omitted).

Petitioner submits that Saito teaches "a distributed computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs." *Id.* (emphasis omitted) (citing Ex. 1005, 1:4–6). Petitioner reasons that a skilled artisan would have been motivated to modify Ziff's single CPU-multiple software subsystem model to utilize Saito's distributed processing architecture to perform the distinct software applications of Ziff's system. *Id.* (citing Ex. 1003 ¶¶ 104–114; Ex. 1004, 2:45–60, 6:13–17, 9:30–43, 13:7–13; Ex. 1005, 1:4–6, 3:36–49). Petitioner reasons that the combination yields a "simple modification" and a skilled artisan

> would have understood that it would have been an obvious design choice to use either a distributed or a non-distributed processing architecture to execute the software applications of Ziff's subsystems . . . [and that a skilled artisan] would have recognized that Ziff teaches its subsystems may operate independently and understood that program instructions may be executed on either distributed hardware components or non-distributed hardware.

Id. at 21–22 (citations omitted). Petitioner further reasons that a skilled artisan

> would have been motivated to modify Ziff's non-distributed system to utilize Saito's distributed processing architecture given the express goals identified in Ziff. For example, Ziff teaches that increased system speed is desirable. A POSITA would have understood that implementing a distributed system with multiple processors, as in Saito, would enhance the goals of improving speed as well as efficiency. Saito expressly teaches the benefit in distributed computer systems of being able to utilize distributed processors to take advantage of different computers' "performance, load, and type[.]" A POSITA would have recognized that Saito teaches a distributed system which would accomplish the performance goals of Ziff's system, such as *increased system speed*.

Id. at 22 (alteration in original) (emphasis replaced) (citing in part Ex. 1003 ¶¶ 107–110, 112).

> Petitioner further reasons that a skilled artisan
>
> would have been motivated to modify Ziff's non-distributed system to implement Ziff's subsystems in a distributed processing architecture, such as taught by Saito. A POSITA would have further understood a distributed system would alleviate the above-noted problems by *providing parallel processing paths such that Ziff's submission, creation, and release subsystems could execute in parallel*.

Id. at 23 (emphasis replaced) (citations omitted) (citing Ex. 1003 ¶¶ 104–114). Dr. Neuman testifies that "using a distributed processing architecture could provide the *benefits of parallel processing which greatly increase the speed and efficiency of a computing system*, [and] parallel processing would have allowed Ziff's submission, creation, and release subsystems to execute in parallel and capture these benefits." Ex. 1003 ¶ 109 (emphasis replaced). Dr. Neuman further testifies that "a way to achieve Ziff's stated goal of

increased system speed would have been to implement Ziff's software subsystems in a distributed architecture, such as that taught by Saito." *Id.* ¶ 110 (emphasis omitted).

Patent Owner presents numerous arguments nested together in contesting the combination of Ziff with Saito. *See* PO Resp. 6–26.

a. Non-Analogous Art Argument

Patent Owner submits that Ziff discloses a "single server using a single CPU" (*id.* at 6 (emphasis omitted)) while Saito discloses an "arbitrary priority-based distribution of processing to execute particular programs across a plurality of computers without a content database" (*id.* at 9 (emphasis omitted)). Patent Owner argues that "*Ziff and Saito are not analogous art to each other*," as they are directed to different systems with different problems and their solutions look very different from each other. *See id.* at 12–13 (emphasis added).

Patent Owner's argument is not persuasive, as it relies on a misstatement of the law. *See* Pet. Reply 12 (identifying the same error).

"A reference qualifies as prior art for an obviousness determination under § 103 only when it is analogous to the *claimed invention*." *In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011) (citing *Innovention Toys, LLC v. MGA Entm't., Inc.*, 637 F.3d 1314, 1321 (Fed. Cir. 2011), and *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004)). In other words, the issue is not whether Saito and Ziff are analogous to each other, as Patent Owner argues (*see* PO Resp. 12–13), but whether Saito and Ziff are each analogous to the invention of the '576 patent. *Sanofi-Aventis Deutschland GmbH v. Mylan Pharms. Inc.*, 66 F.4th 1373, 1377–78 (Fed. Cir. 2023).

Two separate tests define the scope of analogous art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Klein*, 647 F.3d at 1348 (quoting *In re Bigio*, 381 F.3d at 1325).

As to Ziff, we agree with Petitioner that Ziff is within the field of endeavor of and reasonably pertinent to problems addressed by the '576 Patent. Pet. 16 (citing Ex. 1003 ¶ 81); *see also supra* §§ I.C, II.D.1. The '576 patent and Ziff both relate to a process for creating media. *See, e.g.*, Ex. 1001, 1:22–23; *see also* Ex. 1004, 4:66–6:43; *see also* Pet. 16–17 (citing the same). Furthermore, we agree with Petitioner and credit Dr. Neuman's testimony that "like the '576 Patent, Ziff addresses problems related to improving the speed of the processes which allow users to search for and develop media for publication." Ex. 1003 ¶ 81; *see also* Ex. 1001, 3:1–15; *see also* Ex. 1004, 2:45–49, 9:18–19, 13:21–26; *see also* Pet. 17 (contending the same). Accordingly, Ziff and the invention claimed in the '576 patent are analogous to one another.

As to Saito, Saito is within the field of endeavor and reasonably pertinent to the problems addressed by the '576 Patent. *Compare supra* § I.C., *with id.* § II.D.2. We agree with Petitioner and credit the testimony of Dr. Neuman that "[l]ike the '576 Patent, Saito addresses the implementation and utilization of a distributed processing system to execute coordinated software routines." Ex. 1003 ¶ 92; *see also* Pet. 19. Accordingly, Saito is also analogous to the claimed invention of the '576 Patent.

Petitioner has demonstrated by a preponderance of the evidence that Ziff and Saito are analogous to the claimed invention.

b. Motivation to combine Ziff and Saito

Patent Owner argues that "[t]here is also a lack of motivation to combine Ziff and Saito." PO Resp. 13; *see also* PO Sur-Reply 13–17 (arguing that "The Reply Fails to Support the Original Motivation to Combine Ziff and Saito, and Offers New and Still Deficient Motivations"). Patent Owner submits that "Ziff's applications are only configured for operation on a single server with a single CPU and to communicate with and control only one local server database," whereas "Saito does not disclose how software would communicate with a remote content database." PO Resp. 14 (citing Ex. 2001 ¶¶ 58, 65); *see also* PO Sur-Reply 2–5 (arguing that Ziff does not teach three separate "server subsystems"). Patent Owner's expert, Mr. Zatkovich, testifies that "Saita [sic] . . . fails to disclose how software would communicate with a remote content database. Thus, a POSITA would view the teachings of Ziff and Saita [sic] as incompatible, and not find it obvious to combine them." Ex. 2001 ¶ 67; *see also* PO Sur-Reply 5–13 (presenting numerous nested arguments within a general argument that the Petition and Reply fail to address how the combination of Ziff and Saito satisfy the claimed invention). Patent Owner further submits that Ziff "teach[es] away from the centralized database or sets of databases as part of a first server subsystem along [sic] used in connection with plural other distributed server subsystems as claimed in the '576 Patent." PO Resp. 15 (citing Ex. 2001 ¶ 55); *see also* PO Sur-Reply 10 ("Petitioner's analysis ignores that merely adding more CPUs to the single processing server 22 to better handle more users does not avoid a teaching away.").

Patent Owner contends in its Sur-Reply that "Petitioner's Reply ignores the specific configuration of the subsystems and centralized database required by claim 1." PO Sur-Reply 1. Patent Owner argues that "Petitioner's Reply fails to address that the combination of Ziff and Saito does not arrive at the specific claimed configuration and that there is a lack of motivation to combine the references." *Id.*

We disagree with Patent Owner.

Patent Owner's arguments obfuscate Petitioner's relatively straightforward modification, which simply involves "execut[ing] Ziff's subsystems on separate processors, as taught by Saito." Pet. Reply 2–3; *see also* Pet. 21 ("a POSITA would have been amply motivated to utilize the well-known benefits of a distributed processing architecture to implement Ziff's subsystems" (emphasis omitted)).

To illustrate, we reproduce Figure 1 of Ziff, below:

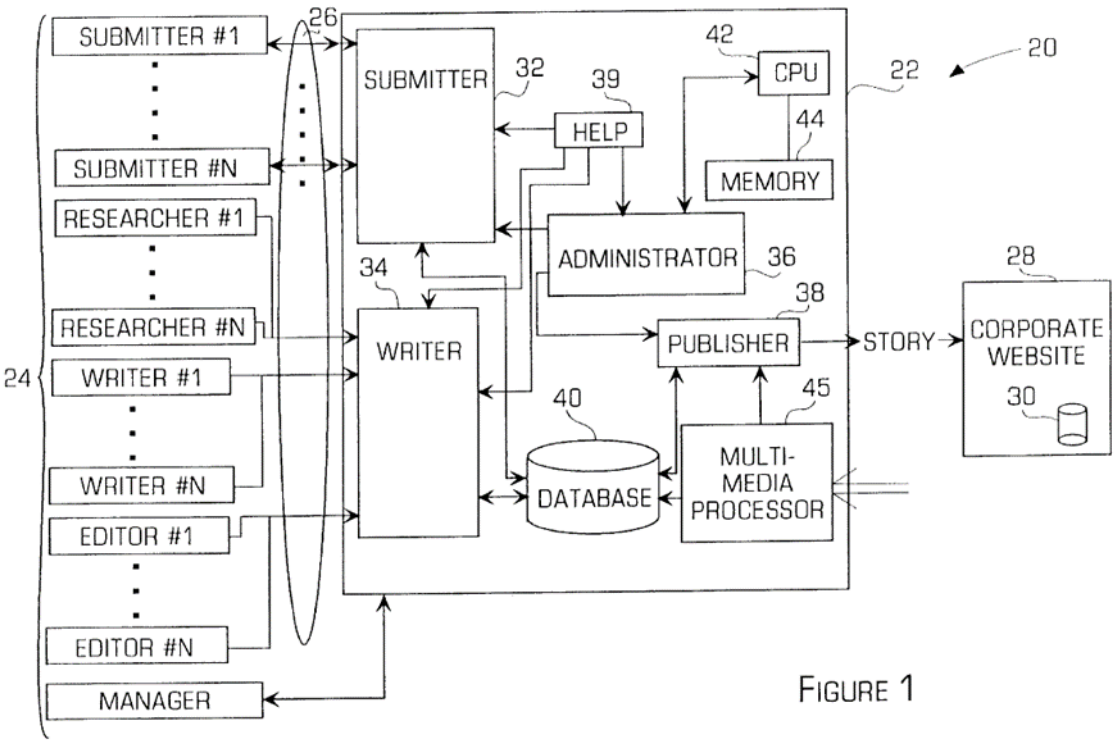

FIGURE 1

Figure 1, reproduced above, is a block diagram depicting Ziff's "story workflow management system." Ex. 1004, 2:31–32. While acknowledging that Ziff's subsystems (e.g., submitter 32, writer 34, and publisher 38) are *executed on a single CPU* (*see* Pet. 2), Petitioner relies on Ziff's submitter 32 to be a "media submissions server subsystem" (*id.* at 36); Ziff's writer 34 to be a "multimedia creator server subsystem" (*id.* at 61); and Ziff's publisher 38 to be a "release subsystem" (*id.* at 71), as recited in claim 1.

As to Saito, Saito teaches that its "invention relates to a distributing computing system having a plurality of computers connected to a network for cooperatively executing a plurality of programs." Ex. 1005, 1:4–6.

Based on Saito's teachings, Petitioner proposes to modify Ziff to utilize a distributed processing architecture with multiple processors, rather than a single CPU, thereby satisfying certain limitations recited in claim 1. *See* Pet. 21–25.

We further disagree with Patent Owner's assertion that Petitioner failed to provide a motivation to combine Ziff with Saito. *See* PO Resp. 13; *see also* PO Sur-Reply 13–17 (arguing that Petitioner's "Reply Fails to Support the Original Motivation to Combine *Ziff* and *Saito*, and Offers New and Still Deficient Motivations"). As set forth above (*see supra* § II.D.4), Petitioner reasons, with *substantial* citations to the record and testimonial support of its expert, Dr. Neuman, that a skilled artisan "would have understood that utilizing Saito's distributed processor system to execute Ziff's software subsystems would have allowed each subsystem to operate independently in a manner that *increases parallelism, speed, and efficiency*." *See, e.g.*, Pet. 25 (citing Ex. 1003 ¶¶ 104–114) (emphasis added). Based on

the record, we find that increasing speed and efficiency are valid reasons for modifying Ziff's system.

Furthermore, we are not persuaded that Ziff *teaches away* from the proposed combination, as Patent Owner argues. *See* PO Resp. 15; *see also* PO Sur-Reply 10 ("merely adding more CPUs . . . does not avoid a teaching away"); *see also* PO Sur-Reply 8 ("the central CPU structure of *Ziff* teaches carrying out a single controlled process that teaches away from carving up its overall functionality onto different dedicated servers"). A reference teaches away if it "criticizes, discredit, or otherwise discourages" investigation into the invention claimed. *General Elec. Co. v. Raytheon Tech. Corp.*, 983 F.3d 1334, 1345 (Fed. Cir. 2020) (citing *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056 (Fed. Cir. 2018); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009)). This is not the case here.

Patent Owner cites nothing in Ziff or Saito that rises to the level of criticizing, discrediting, or otherwise discouraging the proposed combination, which includes "implementing Ziff's software subsystems on the distributed processors," as taught by Saito. *See* Pet. 25 (pointing out the same); *see also General Elec.*, 983 F.3d at 1345; *see also Meiresonne v. Google, Inc.*, 849 F.3d 1379, 1382 (Fed. Cir. 2017) ("A reference that 'merely expresses a general preference for an alternative invention but does not criticize, discredit, or otherwise discourage investigation into' the claimed invention does not teach away") (quoting *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013)). Even if we take Patent Owner's assertions to be true, that "Ziff's applications are only configured for operation on a single server with a single CPU and to communicate with

and control only one local server database," whereas "Saito does not disclose how software would communicate with a remote content database" (PO Resp. 14), this does not rise to the level of teaching away. As explained below, rather than teaching away from the proposed combination, we instead find that the teachings of Ziff would have led a skilled artisan to use multiple processors, as taught by Saito. *See, e.g.*, Ex. 1020 ¶¶ 10, 11 (testifying to the same).

Furthermore, we disagree with Patent Owner's position that "Petitioner fails to adequately explain why the resulting distributed multi-processor system would have the precise arrangement and correspondence between three particular subsystems." PO Sur-Reply 7; *see also id.* at 7–8. Patent Owner contends that "[m]ultiple CPUs do not amount to multiple CPU's each dedicated to a particular subsystem as required by the claims." *Id.* at 10.

A "person of ordinary skill is also a person of ordinary creativity, not an automaton," and "in many cases a person of ordinary skill will be able to fit [multiple] teachings . . . together like pieces of a puzzle." *KSR*, 550 U.S. at 420–21. Based on the teachings of the cited art, a skilled artisan would have been led to modify Ziff, based on Saito's teachings, as Petitioner proposes. In particular, a skilled artisan would have modified Ziff's system to so that submitter 32 (the "media submissions server subsystem"), writer 34 (the "multimedia creator server subsystem"), and publisher 38 (the "release subsystem") utilize separate processors based on Saito's teaching of a distributed system with multiple processors, such that "Ziff's submission, creation, and release subsystems could execute in parallel." *See* Pet. 23 (citing Ex. 1003 ¶ 109); *see also id.* at 22 ("A POSITA would have

recognized that Saito teaches a distributed system which would accomplish the performance goals of Ziff's system, such as increased system speed." (citing Ex. 1003 ¶ 112)).

We find Petitioner's expert, Dr. Neuman, to be a person of ordinary skill in the art at the time of the invention. *See* Ex. 1003 ¶¶ 5–13 (testifying as to Dr. Neuman's qualifications). Dr. Neuman received his S.B., M.S., and Ph.D. in Computer Science by 1992 (*see* Ex. 1003 ¶ 6) and has been an Associate Professor of Computer Science Practice at the University of Southern California since that same year (*see id.* ¶ 7). We find his testimony to be well-reasoned with extensive citations to the record evidence.

In particular, we credit Dr. Neuman's testimony that a "POSITA would have also understood that the allocations in Saito can be specifically determined by a user, particularly given that . . . *distributed computing was well-known which specifically included 'the concept of using multiple processes for receiving, storing, and editing submissions, content, or data files on separate computer components to facilitate distribution*.'" Ex. 1020 ¶ 23 (quoting and citing Ex. 1003 ¶¶ 41–66) (emphasis added). Indeed, a POSITA would have been motivated to modify Ziff so that submitter 32 ("media submissions server subsystem"), writer 34 ("multimedia creator server subsystem"), and publisher 38 ("release subsystem") utilize separate processors, as doing so would improve Ziff's system by allowing it to "complete stories faster." *See, e.g.*, Pet. Reply 4 (citing Ex. 1020 ¶¶ 8, 9; Ex. 1004, 2:33–41).

Moreover, we disagree with Mr. Zatkovich's testimony that "a POSITA would view the teachings of Ziff and Saita [sic] as incompatible, and not find it obvious to combine them." Ex. 2001 ¶ 67. Rather, we credit

Dr. Neuman's competing testimony. As compared to Mr. Zatkovich's testimony, we find Dr. Neuman's testimony to be more credible as it provides clear explanations of the evidence as it relates to the proposed combination.

Specifically, we credit Dr. Neuman's testimony that "a POSITA would have recognized that Ziff teaches a system for cooperatively executing various software applications, and would have been motivated to utilize the well-known benefits of a distributed processing architecture to implement Ziff's subsystems, given the express teachings of Ziff." Ex. 1003 ¶ 106. Notably, Ziff teaches the desirability of increased processing speed. *See, e.g.*, Ex. 1004, 2:54–57 (describing the desirability of "increased speed with which a story is prepared"). Ziff further teaches that its "system may be easily integrated into a corporate Intranet computer network." *Id.* at 3:4–6. We further credit Dr. Neuman's testimony that a "POSITA would have understood that integration into a network (including previously existing corporate Intranet networks) would have motivated a POSITA to use more than one processor, as proposed by Petitioner's Ziff-Saito combination." Ex. 2020 ¶ 10. We further credit Dr. Neuman's testimony that "[o]ne processor would not be sufficient for a large corporation in this context" (*id.*) and that a "POSITA would have understood that Ziff's disclosures related to corporate intranet integration would further support executing Petitioner's proposed Ziff-Saito combination on a distributed, LAN system, which as explained above would work efficiently even at larger scales" (*id.* ¶ 11). Ex. 1020 ¶¶ 10, 11; *see also* Pet. Reply 4 (arguing the same).

Finally, in Patent Owner's Sur-Reply, Patent Owner argues that "The Reply Deviates from the Combination in the Petition to Offer a New 'LAN'

Combination, not part of this Trial." PO Sur-Reply 17–18. Patent Owner contends that the Petition never mentions "LAN" or "local area network," yet Petitioner reasons in the Reply that it would have been obvious to "arrive at a 'LAN implementation of Petitioner's proposed combination.'" *See id.* at 18 (citing Pet. Reply 8).

We further disagree with Patent Owner's argument that Petitioner presented a new theory of obviousness. *See id.* at 17–18. As explained above, with multiple citations to the Petition, Ziff, Saito, and Dr. Neuman's original declaration, we do not find Petitioner to have changed the reasons for combining Ziff and Saito. Although Petitioner references a LAN in the Reply, we do not see this as a new theory of obviousness, but rather an explanation for a position taken in the Petition. For example, the Petition explains that Saito teaches "a distributed computing system having a *plurality of computers connected to a network* for cooperatively executing a plurality of programs." Pet. 21 (emphasis replaced) (citing Ex. 1005, 1:4–6). As the Petition refers to a plurality of computers connected to a network, we do not see Petitioner's explanation of a local area network in the Reply as changing Petitioner's theory of obviousness.

Notwithstanding Patent Owner's extensive arguments to the contrary, Petitioner has demonstrated by a preponderance of the evidence that a skilled artisan would have combined Ziff with Saito as set forth in the Petition.

5. Proposed Combination of Ziff and Saito Fails to Satisfy Claims

Patent Owner further argues that the proposed combination would fail to satisfy several of the claim limitations. *See* PO Resp. 15–26. We address

these particular arguments along with our discussion of each limitation, below. *See infra* § II.D.7.

6. Further combination based on Ferrel's teachings

Petitioner further reasons that a skilled artisan would have been motivated to modify the Ziff-Saito system, discussed above, to utilize Ferrel's "enhanced timestamp." Pet. 26 (citing Ex. 1003 ¶¶ 115–123).

Petitioner submits that Ziff teaches a "submission date," but acknowledges that Ziff does not expressly teach its "submission date" as including "the time of submission." *Id.* (citing Ex. 1003 ¶¶ 115–123). Nevertheless, Petitioner provides four separate reasons why a skilled artisan would have found it obvious to apply Ferrel's timestamp with the Ziff-Saito system. *See id.* at 28–30.

First, Petitioner reasons that a skilled artisan

> would have recognized the need to search for submissions based on when they were received. For example, Ziff teaches its system is flexible, submissions may be received at any time, and all users can work on the story creation process at any time. Ziff also teaches its system increases the speed of the story creation process. . . . These disclosures would have piqued the curiosity of a POSITA such that further investigation would have been done. A POSITA's further investigation would have indicated that a user might search for submissions multiple times in one day, and that *searching based on submission time would have allowed the user to efficiently review new submissions* newly received since the user last searched on the same day—thus saving time by avoiding redundant review and supporting Ziff's goal of increased story preparation speed.

Id. at 28–29 (citations omitted, emphasis added).

Second, Petitioner reasons that a skilled artisan

> would have recognized this design need to search submissions based on when those submissions were received and realized there were only a finite number of predicable solutions—storing submissions based on submission date alone, storing submissions based on submission time alone, or storing submissions based on both submission time and date. Submission date possibilities may have further included the year, month, or day of a submission, and submission time possibilities may have further included the hour, minute, or second of a submission.

Id. at 29 (citations omitted).

> Third, Petitioner reasons that a skilled artisan
>
> would have had a reasonable expectation of success implementing Ferrel's timestamp, which stores both the submission time and date. Specifically, a POSITA would have understood that *timestamps which store submission time—either based on hours, minutes, and/or seconds—were very well-known at the time and easy to implement since computers already tracked such information at the time*.

Id. at 30 (citations omitted, emphasis added).

> Fourth, Petitioner contends that
>
> an analysis of the Graham factors illustrates how implementing Ferrel's timestamp into the Ziff-Saito system would have been obvious. . . . As explained above, the scope and content of the prior art expressly includes searching based on submission time. There are also no practical differences between the claimed invention and Ferrel's timestamp—which both store the submission time and date. Further, the level of a POSITA has been resolved, and the implementation of Ferrel's timestamp would have easily been within the skillset of a POSITA. Finally, there is no evidence of commercial success, long felt unsolved needs, or the failure of others, etc., since timestamps that stored the date and time were extremely well-known and easy to implement at the time.

Id. (citations omitted).

Patent Owner argues that combining Ziff-Saito with Ferrel would not have been obvious. *See* PO Resp. 27–30. In support of Patent Owner's argument, Patent Owner submits that "Ferrel does not teach searching by submission time because it expressly teaches searching by *publication* time." *Id.* at 27. Patent Owner argues that Ferrel *teaches away* from the proposed combination (*see id.* at 28 (citing Ex. 2001 ¶ 77), while Mr. Zatkovich testifies that "updating of a status page in real time would not have required such specific timestamping with a time of submission, but rather a simple updating of the content" (Ex. 2001 ¶ 77). Mr. Zatkovich further testifies that "the disclosures of Ferrel discussed therein, which refer explicitly to searches by publication time, in my opinion would not have been understood as referring to timestamps by submission time, nor would such time provide an enhancement to search results." Ex. 2001 ¶ 79.

Patent Owner further argues that "[t]here is no teaching in Ferrel that submission time is a useful time for searching" and "it is not a sufficient motivation for combining searching by submission time (which is not disclosed by any reference identified by Petitioner)." PO Sur-Reply 28–29. Mr. Zatkovich further testifies that "there has been no showing of any user demand at the time of the invention for searching at such a level of granularity as to when an item was submitted, as opposed to when it was published." Ex. 2001 ¶ 79. Mr. Zatkovich further testifies that

> simply allowing for more options to sort submissions in my opinion is not sufficient motivation for making the proposed combination, as doing so would add to complexity of using and searching the system, and as there has been no showing of any reason why such level of granularity is necessary. Nor, in my opinion, is such a timestamp necessary to Ziff's system to distinguish between submissions received on the same day, as Ziff contains numerous other data points associated with a

> submission that distinguish between content, and a submission time no more guarantees differentiability of content than a submission date. Rather, a POSITA looking to solve such a problem, in my opinion, would have simply assigned a unique identifier to content (e.g., a sequentially assigned number) as was well known in the art, which would have actually guaranteed uniqueness between submissions.

Id. ¶ 80.

We disagree with Patent Owner's arguments. Specifically, we disagree with Patent Owner's assertion that Dr. Neuman erred in analyzing Ferrel. *See* Pet. 27 ("Petitioner's expert contends that Ferrel allows for searching by submission time, however, the excerpt relied on only discloses searching by publication time"). Indeed, Dr. Neuman acknowledges that the cited excerpt of Ferrel teaches searching by publication time. *See, e.g.*, Ex. 1003 ¶ 121. Specifically, Dr. Neuman testifies,

> *Even though Ferrel teaches its timestamp in relation to a "multimedia publishing system,"* a POSITA would have understood that Ferrel's publication process is akin to Ziff's submission process as both store content which can later be searched based on various parameters. . . . Accordingly, a POSITA would have understood that Ferrel's timestamp could easily be implemented into Ziff's submission subsystem.

Id. (citing Ex. 1006, 4:25–5:40, 39:16–19; Ex. 1004, 6:29–64, 13:21–26) (emphasis replaced).

Furthermore, and as to Patent Owner's argument that Ferrel *teaches away* from using submission time (*see* PO Resp. 28), we disagree. Patent Owner cites to nothing in Ferrel or the other cited art that rises to the level of criticizing, discrediting, or otherwise discouraging searching by submission time. *See* Pet. Reply 22 (arguing the same); *see also General Elec.*, 983 F.3d at 1345. Petitioner is correct that "just because Ferrel discloses a

publication time does not mean Ferrel teaches away from using a submission time." Pet. Reply 22 (citing *Eli Lilly & Co. v. Perrigo Co.*, 718 F. App'x 953, 955 (Fed. Cir. 2017)). As explained below, rather than teaching away from the proposed combination, we instead find that the teachings of Ziff and Ferrel would have led a skilled artisan to use submission time. *See, e.g.*, Ex. 1020 ¶¶ 10, 11 (testifying to the same).

As to Patent Owner's argument that "a POSITA would not have been motivated to combine Ferrel with Ziff-Saito" (PO Resp. 27), we also disagree. A skilled artisan at the time of the invention would have made the modification for the purpose of improving accuracy of the Ziff-Saito system. *See, e.g.*, Pet. 27; *see also* Ex. 1003 ¶ 118. Having weighed the evidence and competing testimony of Dr. Neuman and Mr. Zatkovich, we find Dr. Neuman more credible. Dr. Neuman's testimony is well-explained and provides clear and concise citations to the record.

In particular, we credit Dr. Neuman's testimony that a skilled artisan would have recognized that time is important to Ziff's system. Ex. 1003 ¶ 118. Ziff teaches status page 60, which includes the status of each story, including "an unrated story section 64, a stories to be updated section 66[,] and a stories in process and stories completed section 68." *See* Ex. 1004, 9:30–32. Ziff further teaches,

> The status page reflects the status of each story based on the traffic flow defined by the system so that it includes stories that appear because they are *currently in the story creation process*, because they have just come been [sic] submitted as a story submission and need a decision on whether they should be processed, *or because the story needs updating*.

Id. at 9:37–43 (emphases added). Ziff also teaches,

> Once the update has been completed for the particular story, the particular story is removed from the updated section and the predetermined time period is reset so that the story will appear again in the updated section after the predetermined time period expires again. Thus, each story will periodically be placed into the updated section to reverify the accuracy of the story.

Id. at 9:57–63. Ziff discloses that "[t]he important thing about the status page is that it is *automatically updated in real time* as steps of the story creation process are completed so that the status page for any user of the system is *constantly updated*." *Id.* at 10:18–21 (emphases added). Based on these and other teachings, we agree with and credit Dr. Neuman's testimony that a skilled artisan "would have recognized that using a timestamp such as Ferrel's, which stores the submission time as well as the submission date, would have been one common way to implement Ziff's 'predetermined time period.'" Ex. 1003 ¶ 118 (emphasis omitted). We further credit Dr. Neuman's testimony that timestamps were well-known in the art at the time of the invention and that "Ziff's 'predetermined time period' could not only be measured in days (such as the submission date in Ziff) but also in hours, minutes, or seconds" and that "[m]easuring Ziff's 'predetermined time period' in hours, for example, instead of days would have allowed for *more accurate updates* to Ziff's status page." *Id.* (emphasis replaced).

Accordingly, Petitioner has demonstrated by a preponderance of the evidence that a skilled artisan would have further combined Ziff-Saito with Ferrel as set forth in the Petition.

7. Claim 1

a) [1(P)] A computer-based system for generating multimedia content

Petitioner contends that, to the extent the preamble is limiting, Ziff teaches, or at least renders obvious, the preamble by disclosing "*a computer-based system* (e.g., server 22) *for generating multimedia content* (e.g., multimedia processed with a story)" and "a story workflow management system and method [] in which each step of the story creation process from initial lead generation to final publication of the story is tracked[.]" Pet. 33 (alterations in original) (citing Ex. 1004, 2:45–49). Petitioner submits that Ziff's "invention relates generally to a system and method for managing the workflow associated with a story and in particular to a system and method for managing the workflow associated with the preparation, editing and creation of a story." *Id*. at 35 (citing Ex. 1004, 1:8–14, 1:67–2:1).

In support of Petitioner's position, Dr. Neuman testifies that a skilled artisan would have understood that Ziff teaches a computer-based system. Ex. 1003 ¶ 124 (citing Ziff, 5:19–24, Fig. 1).

Patent Owner does not dispute Petitioner's assertions.

Without determining whether the preamble is limiting, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the language recited in the preamble.

b) [1(a)] "an electronic media submissions server subsystem including" [1(a)(1)] "one or more data processing apparatus" and [1(a)(2)] "one or more database stored on a non-transitory medium"

As to limitation 1(a), "an electronic media submissions server subsystem including," Petitioner contends that Ziff's submission application system 32 corresponds to the recited "electronic media submissions subsystem." Pet. 36–37 (citing Ex. 1004, 5:19–30, 6:29–33, Fig. 1; Ex. 1003 ¶¶ 127–28). In referencing Figure 1 of Ziff, Petitioner submits that "Ziff teaches server 22 'house[s] one or more sub-systems[,]' including submission application system 32." *Id.* at 36 (citations omitted).

Dr. Neuman testifies that a skilled artisan "would have understood that *Ziff's* submission application system 32 teaches, or at least renders obvious, the claimed *electronic media submissions server subsystem.*" Ex. 1003 ¶ 127.

As to limitation 1(a)(1), "one or more data processing apparatus," Petitioner further contends that the combined teachings of Ziff and Saito teach, or at least render obvious, this limitation by disclosing "an *electronic media submissions server subsystem* (e.g., *Ziff*'s submission application system 32) that includes its own *one or more data processing apparatus* (e.g., *Saito*'s first distributed processor)." Pet. 37 (citing Ex. 1003 ¶¶ 129–131).

According to Petitioner, because Ziff's CPU 42 executes its software applications and Saito teaches a distributed processor system for cooperatively executing a plurality of disparate programs, a skilled artisan would have been motivated to make the simple modification allowing Ziff's non-distributed subsystems to execute on distributed processors as taught by

Saito. *Id*. Petitioner contends that "Ziff's various software components are subsystems in a cooperative system, but Ziff does not expressly teach that each software application—which perform the respective functions of Ziff's story creation subsystems—are implemented on separate processors." *Id.* at 20. Petitioner states that, while Ziff expressly teaches its distinct subsystems are executed on the same CPU, a person of ordinary skill in the art would have been motivated to utilize the well-known benefits of Saito's distributed processing architecture to implement Ziff's subsystems. *Id*. at 20–21 (citing Ex. 1003 ¶¶ 104–114; Ex. 1004, 6:37–41). Petitioner further contends that Saito expressly teaches the benefit in distributed computer systems of being able to utilize distributed processors to take advantage of different computers' "performance, load, and type." *Id*. at 22 (citing Ex. 1005, 3:36–49; Ex. 1003 ¶ 112). According to Petitioner, a person of ordinary skill in the art would have understood that it would have been an obvious design choice to use either distributed or non-distributed processors to execute Ziff's subsystems, and this skilled artisan would have understood that implementing a distributed system with multiple processors, as in Saito, would enhance Ziff's goals of *improving speed as well as efficiency*. *Id*. at 21–22 (citing Ex. 1004, 2:45–60; Ex. 1003 ¶¶ 107–110) (emphasis added).

As to limitation 1(a)(2), "one or more database stored on a non-transitory medium," Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that "*electronic media submissions server subsystem* (e.g., submission application system 32) includes *one or more databases* (e.g., database 40)" and Ziff has "a database for storing information about each submission and each completed story" and "submission application system 32 automatically store[s] the gathered

information in the database 40." Pet. 38 (citing Ex. 1004, 3:38–40, 6:48–50). Petitioner further contends that Ziff teaches that "database 40 is *stored on a non-transitory medium*." *Id.* (citing Ex. 1003 ¶¶ 132–136).

Patent Owner disputes Petitioner's arguments under limitations 1(a), 1(a)(1), and 1(a)(2). *See* PO Resp. 16. In particular, Patent Owner submits that "Ziff discloses all software sharing the same server hardware . . . [and that a] POSITA would therefore understand that Ziff does not disclose subsystems because applications are different functionality and in Ziff each application is not associated with a different data processing apparatus." *Id.* at 17 (citations omitted). Patent Owner further submits that "Ziff also only discloses a single database only accessible by the programs on the same server as the database." *Id.* (citations omitted). Patent Owner further submits that "Saito also does not disclose applications distributed to different processors that access a centralized database." *Id.* at 18.

We disagree with Patent Owner. Nonobviousness cannot be established by attacking references individually where the unpatentability challenge is based upon the teachings of a combination of references. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Here, Petitioner does not rely on Ziff or Saito in isolation for addressing the claimed features; instead, Petitioner proposes to modify Ziff based on Saito's teachings for the purpose of improving speed and efficiency. *See, e.g.*, Pet. 36–38 (relying on a combination of Ziff's teachings and Saito's teaching to address the limitations recited in 1(a)(1) and 1(a)(2)); *see also* Pet. Reply 25 (explaining the same). As explained in greater detail above, we agree with Petitioner and credit Dr. Neuman's testimony's that a skilled artisan would have been

motivated to combine Ziff and Saito to arrive at the claimed features. *See supra* § II.D.4.

Having weighed the evidence and competing testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(a), 1(a)(1), and 1(a)(2).

> c) *[1(a)(3)] a submissions electronic interface configured to receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user of the plurality of users, where the second user is not the first user*

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that its

> *electronic media submissions server subsystem* (e.g., submission application system 32) includes *a submissions electronic interface* (e.g., submission application system 32's user interface) *configured to receive a first electronic media submission* (e.g., a submission) *from a first user* (e.g., Submitter#1) *of a plurality of user[s]* (e.g., Submitter#1–Submitter#N) *over a public network* (e.g., the Internet).

Pet. 39 (citing Ex. 1003 ¶¶ 137–143). Petitioner contends that Ziff's "submission application system 32 may generate a user interface, as described in . . . FIGS. 2A–2C, to gather information from a user about a possible story idea (a submission)." *Id.* (emphasis omitted) (citing Ex. 1004, 6:45–48).

Petitioner also contends that Ziff teaches, or at least renders obvious,

> *submissions electronic interface* (e.g., submission application system 32's user interface) is *configured to store said first*

> *electronic media submission* (e.g., a submission) in said one or more database (e.g., database 40) *with at least a second electronic media submission received from a second user of a plurality of users, where the second user is not the first user* (e.g., submissions from Submitter#1–Submitter#N).

Pet. 43 (citing Ex. 1003 ¶¶ 137–139). Petitioner argues that Ziff's submission application system 32's user interface is configured to receive multiple users' submissions and "automatically store the gathered information in the database 40." *Id*. at 44 (citing Ex. 1004, 5:33–35, 6:48–51).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(a)(3).

d) [1(a)(3)(i)] wherein the first electronic media submission includes: data identifying the first user

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing "*the first electronic media submission* (e.g., a submission) *includes data identifying the first user* (e.g., first name and last name)." Pet. 44. Petitioner argues that Ziff's "database 40 may store various pieces of information about each story including . . . information about the person who submitted the story" and Ziff's "submission form 50 gathers 'contact information about the submitter' (e.g., first name and last name as shown in Figure 2A)." *Id*. (alteration in original) (citing Ex. 1004, 7:40–44, 6:45–64, 8:13–36, Figures 2A–2C). Petitioner further submits an

annotated version of Ziff's Figure 2A (Pet. 45), a copy of which we reproduce, below:

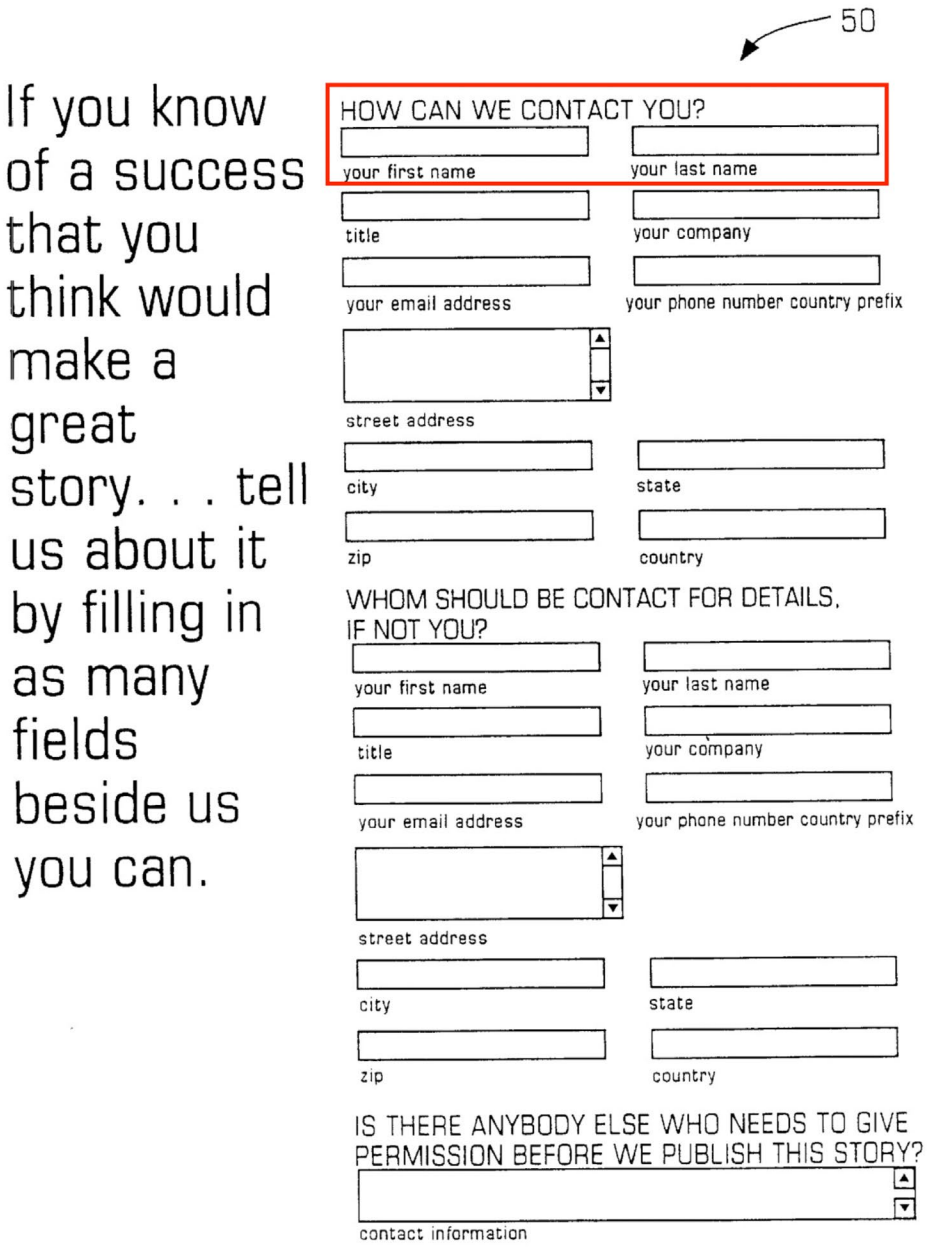

FIGURE 2A

Figure 2A, reproduced above, illustrates an example of a submission form in accordance with Ziff's invention. Ex. 1004, 2:33–34. Petitioner annotates Figure 2A by adding a red box around "HOW CAN WE CONTACT

YOU?," which includes entry forms for "your first name" and "your last name." *See* Pet. 45. Dr. Neuman testifies that "A POSITA would have understood Ziff's stored 'first name' and 'last name' are data identifying the first user." Ex. 1003 ¶ 144.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(a)(3)(i).

e) [1(a)(3)(ii)] data identifying the date and time associated with receipt of the first electronic media submission

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that Ziff's "*first electronic media submission* (e.g., a submission) includes *data identifying the* ***date*** *associated with the receipt of the first electronic media submission* (e.g., submission date)." Pet. 46. Petitioner contends that Figure 4A, which illustrates an exemplary status page of a submitted story, shows that the "Submission Date" of a story is stored along with the associated submission. *Id*. at 47 (citing Ex. 1004, 4:37–39, 9:6–29, Fig. 4A; Ex. 1003 ¶ 146).

Petitioner further acknowledges that Ziff does not expressly teach the submission includes data identifying the *time* associated with receipt of the first electronic media submission, but contends that *Ferrel teaches a timestamp* that stores both the time and date, and a skilled artisan would have been motivated to modify the Ziff-Saito system to utilize Ferrel's

enhanced timestamp. Pet. 47–48 (emphasis replaced) (citing Ex. 1006, 22:39–62, 40:43–53; Ex. 1003 ¶¶ 146–151).

Dr. Neuman testifies that "[t]imestamps that include both date and time, such as the one taught by Ferrel, were extremely well-known at the time of the invention and therefore easy to implement." Ex. 1003 ¶ 149. Dr. Neuman further testifies, "Ferrel's timestamp teachings—which include both the date and the time—as easily implemented into the Ziff-Saito system, teach, or at least render obvious, the claimed data identifying the date and time associated with receipt of the first electronic media submission." *Id.* ¶ 150.

Patent Owner does not present any additional argument addressing these limitations. As discussed above, we agree with Petitioner and credit Dr. Neuman's testimony that a skilled artisan would have combined Ziff-Saito with Ferrel's teachings of a timestamp to satisfy the recited time requirement of limitation 1(a)(3)(ii). *See infra* § II.D.6.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(a)(3)(ii).

f) [1(a)(3)(iii)] data indicating content of the first electronic media submission

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that Ziff's "*first electronic media submission* (e.g., a submission) includes *data indicating content of the first electronic media submission* (e.g., submitted description text of the project)." Pet. 49. Petitioner argues that Ziff's submission form 50 includes fields allowing the

submitter to input information describing the content of a submission as shown in Figures 2A–2C, including, for example, the "tell us your story" field. *Id*. (citing Ex. 1004, Figs. 2B, 5A). According to Petitioner, a person of ordinary skill in the art would have understood that Ziff's "submitted description text of the project is included in the electronic submission and indicates the content of a submission" and this data "indicates the content of a submission is automatically stored in database 40 along with other gathered submission information and data." *Id*. at 51 (citing Ex. 1003 ¶¶ 152–55 (citing Ex. 1004, 6:45–50)).

Dr. Neuman testifies that a "POSITA would have understood that the submitted text, for example seen in the "Describe the project" stored information of the "Original Submission Data," as shown in Ziff's Figure 5A, "is data that indicates the content of the submission." *See* Ex. 1003 ¶ 153; *see also* Pet. 57 (providing an annotated version of Ziff's Figure 5A). Dr. Neuman further testifies that a "POSITA would have understood that this data that indicates the content of a submission is automatically stored in database 40 along with other gathered submission information and data." Ex. 1003 ¶ 154.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(a)(3)(iii).

> g) *[1(b)] the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein*

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that Ziff's "*one or more databases* (e.g., database 40) *comprising criteria* (e.g., criteria which may be used for purposes of searching the database—such as key words in the title, text about the submitter's story, or categorical information)." Pet. 51. According to Petitioner,

> the claimed *criteria* here is different from the submitted description text of the project that indicates the content above in limitation 1(a)(3)(iii). There, the submitted description text of the project is data submitted as part of a submission. *Criteria* here is data that is already stored in the database for the purpose of searching and filtering. Accordingly, submitted description text of the project and *criteria* serve two different functions and are distinct concepts that teach the respective limitations in 1(a)(3)(iii) and 1(b).

Id. at 52. Petitioner contends that Ziff's criteria, including keywords, are shown in Figures 11A–11B. *Id*. at 52–55.

Petitioner also contends that Ziff teaches, or at least renders obvious, this limitation by disclosing the Ziff's "*criteria* are *associated with one or more users of a plurality of users stored therein* because *criteria* data is stored in database 40 as part of the same record as the first name and last name of the submitter, and there may be a plurality of submissions from a plurality of submitters." Pet. 60. Petitioner argues that Ziff's "database 40 stores information about the story at the various stages of the story generation process, including submission data, in a story record with a unique numeric identifier." *Id*. (citing Ex. 1004, 6:48–51, 7:8–11). "As shown in form 50 of Figures 2A–2C, the stored submission data specifically

includes information about the submitter and text describing the submission from the submission." *Id*. (citing Ex. 1004, 3:38–40, 6:45–51, Figs. 2A–2C). "Figure 5B also teaches that the associated project title is stored along with the story data." *Id*. at 60–61 (citing Ex. 1004, 6:48–51, 7:8–11, Fig. 5B). According to Petitioner, a person of ordinary skill in the art would have understood that Ziff's "sole database stores all story data in a unique record, which includes the above identified *criteria* as well as submitter information, therefore associating the *criteria* with the user." *Id*. at 61 (citing Ex. 1003 ¶¶ 156–161).

Dr. Neuman testifies that a "POSITA would have understood that Ziff teaches a sole database" and that "POSITA would have further understood that Ziff's database stores story data (including the above identified criteria) in a unique story record which also includes information about the user, based on the above disclosures." Ex. 1003 ¶ 161. Dr. Neuman further testifies that a "POSITA would have therefore understood that stored criteria is associated with the users." *Id.*

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(b).

h) [1(c)] an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including

Petitioner contends that the combined Ziff-Saito system teaches, or at least renders obvious, this limitation and limitations 1(c)(1)–1(c)(3) by disclosing "*an electronic multimedia creator server subsystem* (e.g., *Ziff*'s writer system 34) *operatively coupled* (e.g., allows for data communication) *to the electronic media submissions server subsystem* (e.g., submission application system 32)." Pet. 61. Petitioner contends that Ziff teaches "writer system 34 comprises user interface pages 'which manage the story creation process'" and writer system 34's "user interface pages include a search page (shown in Figures 11A–11B) to filter submissions based on *criteria* and additional pages (shown in Figures 4–10) to manage the story creation process, 'such as a page for managing multimedia components and multimedia production' (not shown in Figures)." *Id*. at 61–62 (citing Ex. 1004, 8:67–9:28).

According to Petitioner, a person of ordinary skill in the art would have understood that "computer components *operatively coupled* together simply require data communication between components" and "*Ziff* teaches its subsystems relay data between each other as a user interacts with *Ziff*'s subsystems." Pet. 62 (citing Ex. 1003 ¶¶ 165–167; Ex. 1004, 5:44–61, 6:29–33, 7:8–11, 7:56–59, Fig. 1).

Dr. Neuman testifies that a "POSITA would have further understood that in the combined Ziff-Saito system that uses distributed processors for Ziff's submission application system 32 and Ziff's writer system 32, the subsystems would still be operatively coupled to each other because the subsystems are connected over the network and distributed systems were

well-known at the time to be interconnected in order to relay data for proper functioning." Ex. 1003 ¶ 168.

Other than those unpersuasive arguments discussed above, Patent Owner does not present any additional argument addressing these limitations. *Compare* PO Resp. 16–20, *with supra* § II.D.7.b.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(c).

i) [1(c)(1)] one or more second data processing apparatus

Petitioner contends that the combined teachings of Ziff and Saito teach, or render obvious, this limitation. Pet. 62. As explained above, Petitioner contends Ziff's "subsystems are software applications cooperatively executed by CPU 42, *Saito* teaches a distributed processor system for cooperatively executing a plurality of programs," and a person of ordinary skill in the art would have been motivated "to make the simple modification allowing *Ziff*'s non-distributed subsystems to execute on distributed processors as taught by *Saito*—resulting in the *Ziff-Saito* System." *Id*. at 62–63. Thus, Petitioner contends that "the combination of *Ziff* and *Saito* teach, or at least render obvious, *electronic multimedia creator server subsystem* (e.g., writer system 32) includes *one or more second data processing apparatus* (e.g., *Saito*'s second distributed processor)." *Id*. at 63.

Dr. Neuman testifies that "Ziff teaches the claimed electronic multimedia creator server subsystem (e.g., writer system 34) as a software application executed by the same CPU and server as Ziff's other subsystems." Ex. 1003 ¶ 170. Dr. Neuman further testifies that a "POSITA

would have been motivated to modify Ziff's non-distributed processing system to utilize separate processors to execute Ziff's different software subsystems, as taught by Saito, with a reasonable expectation of success." *Id.* Dr. Neuman testifies that as "incorporated into Ziff's system, Saito's express teachings that each computer in Saito's distributed processing architecture which execute different software applications comprises its own processor teaches, or at least renders obvious, the claimed one or more second data processing apparatus in the claimed electronic multimedia creator server subsystem." *Id.* ¶ 171.

Other than those unpersuasive arguments discussed above, Patent Owner does not present any additional argument addressing these limitations. *Compare* PO Resp. 16–20, *with supra* § II.D.7.b.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(c)(1).

> *j) [1(c)(2)] an electronic content filter configured to apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user*

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation. Pet. 63. Petitioner submits that, as discussed above in connection with limitation 1(a)(3)–1(a)(3)(i), a person of ordinary skill in the art would have understood that "*criteria* are *associated with at least one user*

of the plurality of users because criteria data are stored in records in database 40 along with the first name and last name of the submitter, and there may be a plurality of submissions from a plurality of submitters." *Id*. at 66–67 (citing Ex. 1003 ¶ 175). Thus, Petitioner contends that

> *Ziff*'s *electronic content filter* (e.g., writer system 34's user interface pages) is *configured to apply criteria* (e.g., criteria) *associated with at least one user of the plurality of users* (e.g., submission data stored and associated with Submitter#1–Submitter#N) *to obtain a plurality of electronic media submissions* (e.g., one or more stories which match the search criteria) *from the one or more database* (e.g., database 40).

Id. at 67.

Petitioner also contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that "writer system 34's user interface pages are *configured to develop multimedia content* (e.g., the pre-publication processes) *to be electronically available for viewing on at least one user device associated with the first user* (e.g., viewable on a submitter's computer)." Pet. 67. Petitioner also contends that the submitter may be the user. *Id*. at 68–69 (citing in part Ex. 1004, 2:33–37, 2:61–65).

Dr. Neuman testifies that

> Ziff teaches, or at least renders obvious, an electronic content filter configured to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user (e.g., a submitter's computer 24) because writer system 34's user interface pages allow the submitter to view and develop the content throughout the process. See, e.g., Ziff, 2:33–37, 61–65 (establishing the submitter may be the end user), 5:19–43, Fig. 1 (identifying the submitter's computer 24), 9:32–33 ("A unique status page may be generated for each user of the system"), 10:21–26 ("Each status page also provides an individually customized overview of the entire process from the perspective of the writer, editor,

> administrator or other authorized user (i.e., each user views his own personalized status page based on the stories for which the user has responsibility)."), 11:15–19 ("the story is ready for publishing and is awaiting the final review by the editor, customer and possibly the person/organization featured in the story and the posting of a date after which the story may be published."); see also Ziff, 3:9–16, 4:8–15, 5:30–35, 7:14–26, 9:2–5, 14:31–36 (collectively describing that any user may view the processes in writer system 34's user interface pages). To be sure, Ziff expressly contemplates the submitter may also be the writer. Compare Ziff, Fig. 5A (identifying "Bill Cattell" as the submitter) with Fig. 10C (identifying "Bill Cattell" as the author). A POSITA would have recognized these disclosures and understood the submitter could view and help develop the content.

Ex. 1003 ¶ 178 (emphases omitted). As can be seen above, Dr. Neuman's cogent testimony provides multiple citations to the record with clear explanations as to the relevancy of each citation.

Other than those unpersuasive arguments discussed above, Patent Owner does not present any additional argument addressing these limitations. *Compare* PO Resp. 16–20, *with supra* § II.D.7.b.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(c)(2).

k) [1(c)(3)] wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content

Petitioner contends that Ziff teaches, or at least renders obvious, this limitation by disclosing "*data identifying a respective user* (e.g., access level information about a writer) *is maintained for each electronic media*

submission within the multimedia content (e.g., stored in database 40 with all submission data, including associated multimedia)." Pet. 69–70. Petitioner submits that Ziff teaches "different types of users (for example a submitter, writer, or editor) may access different user interface pages of writer system 34." *Id*. at 70 (citing Ex. 1004, 6:65–7:12).

Dr. Neuman testifies that a "POSITA would have understood that Ziff's system stores a writer's access level to different submissions" and that the "POSITA would have further understood that storing a writer's access level for different submissions would require data that identifies both the writer and which submissions a writer has access to—allowing the writer to access the user interface pages of writer system 34." Ex. 1003 ¶ 180 (emphasis omitted). Based on this, Dr. Neuman further testifies that "Ziff teaches, or at least renders obvious, data identifying a respective user (e.g., access level information about a writer) is maintained for each electronic media submission within the multimedia content (e.g., stored in database 40 with all submission data, including associated multimedia)." *Id.* (emphasis omitted).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(c)(3).

> *l) [1(d)] an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices*

Petitioner contends that the combined Ziff-Saito system teaches, or at least renders obvious, this limitation by disclosing "*an electronic release subsystem* (e.g., publisher system 38) *operatively coupled* (e.g., allows for data communication) *to the electronic multimedia creator server subsystem* (e.g., writer system 34)." Pet. 71. Petitioner submits that Ziff teaches its (1) server-based system "house[s] one or more sub-systems" including "publisher system 38" (citing Ex. 1004, 5:19–24, 6:29–33) and (2) "publisher system 38 is *operatively coupled* (e.g., allows data communication) *to the electronic multimedia creator server subsystem* (e.g., writer system 34)" (citing Ex. 1004, Figure 1). Pet. 71. According to Petitioner, a person of ordinary skill in the art would have understood that, "in the combined *Ziff-Saito* system using distributed processors for *Ziff*'s publisher system 38 and *Ziff*'s writer system 32, the subsystems would still be *operatively coupled* to each other because the subsystem are connected over the network" and "distributed systems were well-known at the time to be interconnected in order to relay data for proper functioning." *Id*. at 72 (citing Ex. 1003 ¶¶ 184–187).

Petitioner contends that, while Ziff "does not expressly teach the *release subsystem* includes *one or more third data processing apparatus*," Ziff's subsystems, as explained above, "are software applications cooperatively executed by CPU 42, *Saito* teaches a distributed processor system for cooperatively executing a plurality of programs," and a person of

ordinary skill in the art would have been motivated "to make the simple modification allowing *Ziff*'s non-distributed subsystems to execute on distributed processors as taught by *Saito*—resulting in the *Ziff-Saito* system." Pet. 72. Petitioner, thus, contends that "the combination of *Ziff* and *Saito* teach, or at least render obvious, the *electronic release subsystem* (e.g., publisher system 38) includes *one or more third data processing apparatus* (e.g., *Saito*'s third distributed processor)." *Id*.

Petitioner further contends that Ziff teaches, or at least renders obvious, this limitation by disclosing that Ziff's "publisher system 38 is *configured to make the multimedia content electronically available for viewing on a plurality of user devices* (e.g., client computers 24 in Figure 1)." Pet. 73.

Dr. Neuman testifies that

> Ziff teaches publisher system 38 is configured to make the multimedia content electronically available for viewing on a plurality of user devices (e.g., client computers 24). Ziff teaches "publisher 38 may generate a downloadable version of the generated success story" and "may also forward the completed, read-to-be published success story to the corporate website 28." Ex. 1004, Ziff, 7:32–37. Ziff also teaches that after the publication date, "the story is published on a web site and may be viewed by anyone accessing the web site." Ex. 1004, Ziff, 13:17–18; see also, Ziff, 5:62–6:1 ("the resultant story (STORY) may be output over a communications link, such as the Internet or e-mail, to a corporate web site 28 which stores the finished success stories in a database 30 [sic] and displays the success stories to client computers who access the corporate web site."). A POSITA would have understood the finalized content is available for viewing on multiple electronic devices.

Ex. 1003 ¶ 190.

Other than those unpersuasive arguments discussed above, Patent Owner does not present any additional argument addressing these limitations. *Compare* PO Resp. 16–20, *with supra* § II.D.7.b.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in 1(d).

m) Conclusion

Petitioner has demonstrated by a preponderance of the evidence that independent claim 1 would have been obvious over the combination of Ziff, Saito, and Ferrel.

8. Claim 2

Claim 2 depends from claim 1 and further recites, "wherein the first electronic media submission includes one or more images and text." Ex. 1001, 40:1–3.

Petitioner submits that Ziff's "submission form 50 includes fill-in-the-blank fields allowing a user to include text with the submission." Pet. 74 (referencing limitation 1(a)(3)). In addition to referencing Petitioner's prior treatment of limitation 1(a)(3), Petitioner cites to Ziff's disclosure that its

> [M]ultimedia processor system 45 may receive multimedia (e.g., images, video, audio, animation, etc.) for a particular story and store the multimedia in the database 40. A unique identifier may be generated for each piece of multimedia received to identify the story with which the multimedia is associated. The multimedia may then be processed to fit into the publication requirements of the system and published with the story once the story has been completed.

Ex. 1004, 7:66–8:7; *see also* Pet. 74 (quoting the same).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 2.

9. Claim 4

Claim 4 depends from claim 1 and further recites, "wherein the first electronic media submission includes data text." Ex. 1001, 40:8–9.

Petitioner references its challenge to limitations 1(a)(3)–1(a)(i) and claim 2. *See* Pet. 74. We reproduce Figure 2B of Ziff, below:

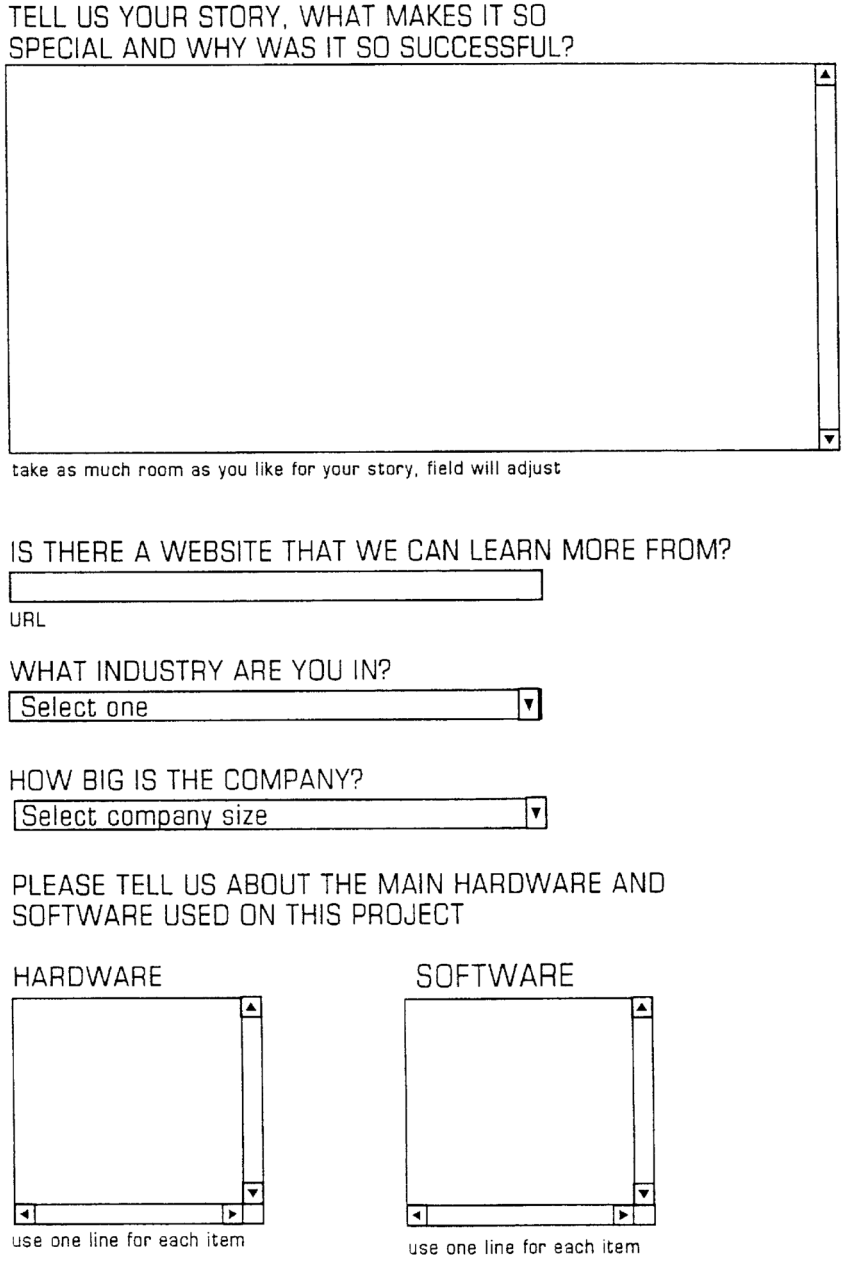

FIGURE 2B

Figure 2B, reproduced above, depicts an example of Ziff's submission form. *See* Ex. 1004, 4:33–34. We find that this figure, along with related Figures 2A and 2C, depicts a submission form that includes fields allowing the submitter to input information describing the content of a submission,

including the "tell us your story" field, which would include data text. *See also* Pet. 49 (referencing the same).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 4.

10. Claim 5

Claim 5 depends from claim 1 and further recites, "wherein the computer-based system further includes an editing subsystem configured to enable the first user to edit the multimedia content." Ex. 1001, 40:10–13.

Petitioner submits that Ziff's "writer system 34 may comprise 'a plurality of user interface pages, shown in FIGS. 4–11, which manage the story creation process.'" Pet. 75 (quoting Ex. 1004, 8:67–9:2). Petitioner quotes Ziff's disclosure that "[e]ach of the writer pages may include a notes section (not shown) which permits the person using the page to enter notes about the story." *Id.* (quoting Ex. 1004, 9:2–5). Petitioner contends that these "pages expressly include 'a story writing page in FIGS. 8A and 8B' and '*an editing page as shown in FIGS. 9A and 9B*,'" and that Ziff further teaches that "'additional pages may be added to provide more functionality to the system, such as a page for managing multimedia components and multimedia production.'" *Id.* (quoting Ex. 1004, 9:6–24) (emphasis added). We reproduce Figure 9A of Ziff, below:

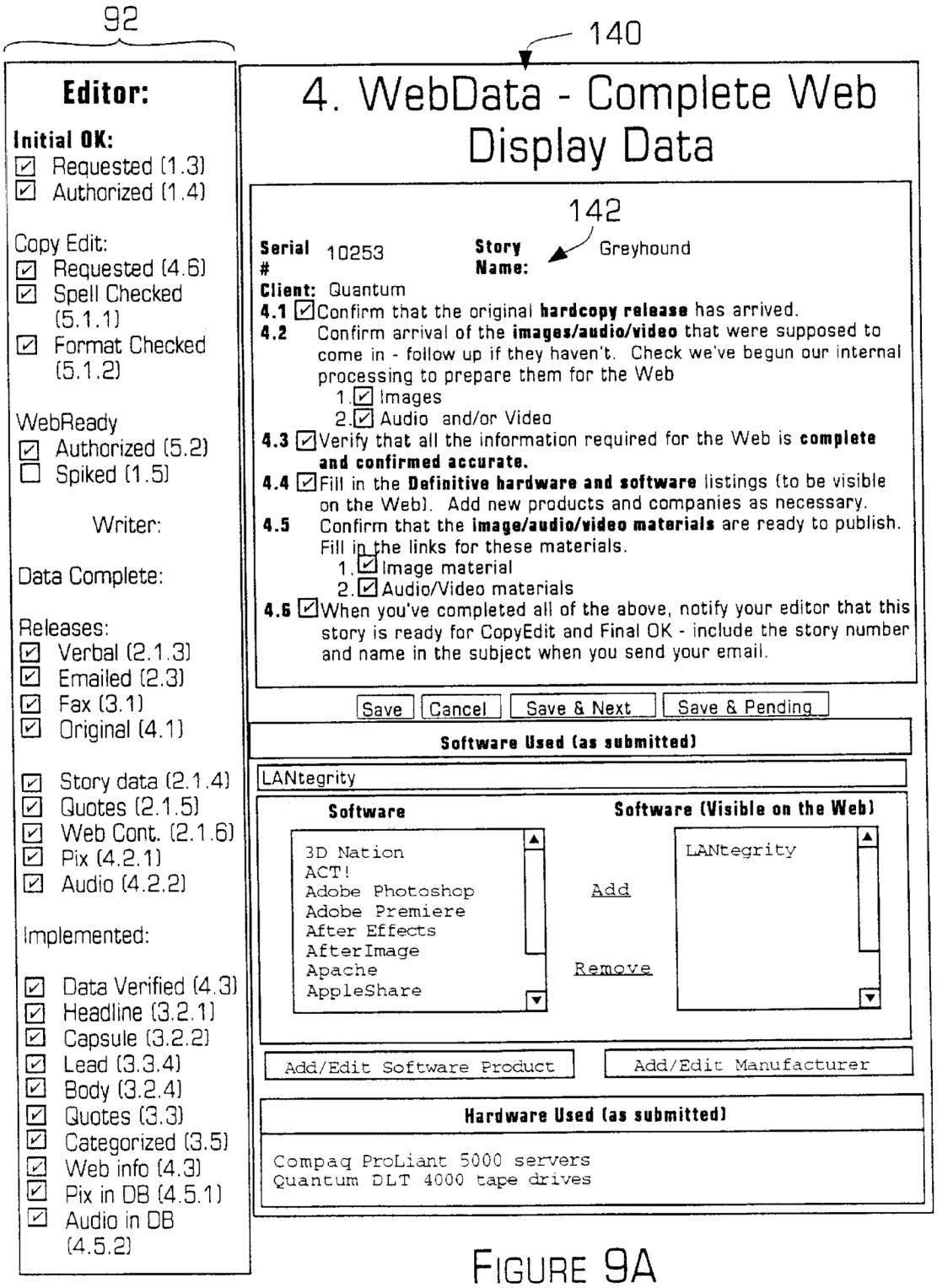
92
140
Editor:
Initial OK:
Requested (1.3)
Authorized (1.4)
Copy Edit:
Requested (4.6)
Spell Checked (5.1.1)
Format Checked (5.1.2)
WebReady
Authorized (5.2)
Spiked (1.5)
Writer:
Data Complete:
Releases:
Verbal (2.1.3)
Emailed (2.3)
Fax (3.1)
Original (4.1)
Story data (2.1.4)
Quotes (2.1.5)
Web Cont. (2.1.6)
Pix (4.2.1)
Audio (4.2.2)
Implemented:
Data Verified (4.3)
Headline (3.2.1)
Capsule (3.2.2)
Lead (3.3.4)
Body (3.2.4)
Quotes (3.3)
Categorized (3.5)
Web info (4.3)
Pix in DB (4.5.1)
Audio in DB (4.5.2)
4. WebData - Complete Web Display Data
142
Serial # 10253
Story Name: Greyhound
Client: Quantum
4.1 Confirm that the original hardcopy release has arrived.
4.2 Confirm arrival of the images/audio/video that were supposed to come in - follow up if they haven't. Check we've begun our internal processing to prepare them for the Web
1. Images
2. Audio and/or Video
4.3 Verify that all the information required for the Web is complete and confirmed accurate.
4.4 Fill in the Definitive hardware and software listings (to be visible on the Web). Add new products and companies as necessary.
4.5 Confirm that the image/audio/video materials are ready to publish. Fill in the links for these materials.
1. Image material
2. Audio/Video materials
4.6 When you've completed all of the above, notify your editor that this story is ready for CopyEdit and Final OK - include the story number and name in the subject when you send your email.
Save
Cancel
Save & Next
Save & Pending
Software Used (as submitted)
LANtegrity
Software
3D Nation
ACT!
Adobe Photoshop
Adobe Premiere
After Effects
AfterImage
Apache
AppleShare
Add
Remove
Software (Visible on the Web)
LANtegrity
Add/Edit Software Product
Add/Edit Manufacturer
Hardware Used (as submitted)
Compaq ProLiant 5000 servers
Quantum DLT 4000 tape drives

FIGURE 9A

Figure 9A, reproduced above, is a diagram "illustrating an example of a user interface page for managing the story publication preparation process in accordance with" Ziff's invention. Ex. 1004, 4:54–56.

Dr. Neuman testifies that

> Ziff teaches system 20 provides different access rights for its various subsystems depending on the user. Ziff, 7:13–14. For example, the user accessing the submission application system 32 may only have rights to access that user's story, while other editors may have access to multiple stories. Ziff, 7:2–19. *Ziff also teaches the end user may both submit and edit the story before publication*. Ziff, 2:61–3:12 ("end users may submit story submissions to the system," and "[t]he system allows for more time and space flexibility for everybody in the process since the story creation is not constrained by location or time (i.e., *everybody can work on it from anywhere at any time*)"). Ziff teaches a story writer must check aspects of the story (such as finding the submitter and obtaining images and other media as required), thus establishing the *submitter may edit the multimedia content after submission*. Ziff, 1:40–45. *A POSITA would have recognized these disclosures and understood the submitter may edit the content.* Therefore, it is my opinion that Ziff teaches, or at least renders obvious, Claim 5.

Ex. 1003 ¶ 191 (emphasis replaced).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 5.

11. Claim 6

Claim 6 depends from claim 1 and further recites, "wherein the multimedia content includes video." Ex. 1001, 40:15–16.

In addressing this claim, Petitioner references its challenge to limitations 1(c)(2) and Ziff. Pet. 76 (citing Ex. 1004, 12:39–49). Ziff discloses that its writer system 34 "confirm[s] any incoming videos or images associated with the story" and "confirm[s] the image and video materials are ready to publish." *See* Ex. 1004, 12:39–49.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 6.

12. Claim 7

Claim 7 depends from claim 1 and further recites, "wherein the electronic filter applies criteria identifying a media submission's subject matter." Ex. 1001, 40:17–19.

To address this claim, Petitioner references its challenge to limitations 1(b) and 1(c)(2). Pet. 76. Petitioner submits that Ziff's "submission information includes fields for the submitter to describe the story or content as seen in Figure 2C." *Id.* Petitioner further submits that the "information can then be searched based on keywords as depicted by Figure 11B." *Id.* at 77. We reproduce Figure 11B of Ziff, below:

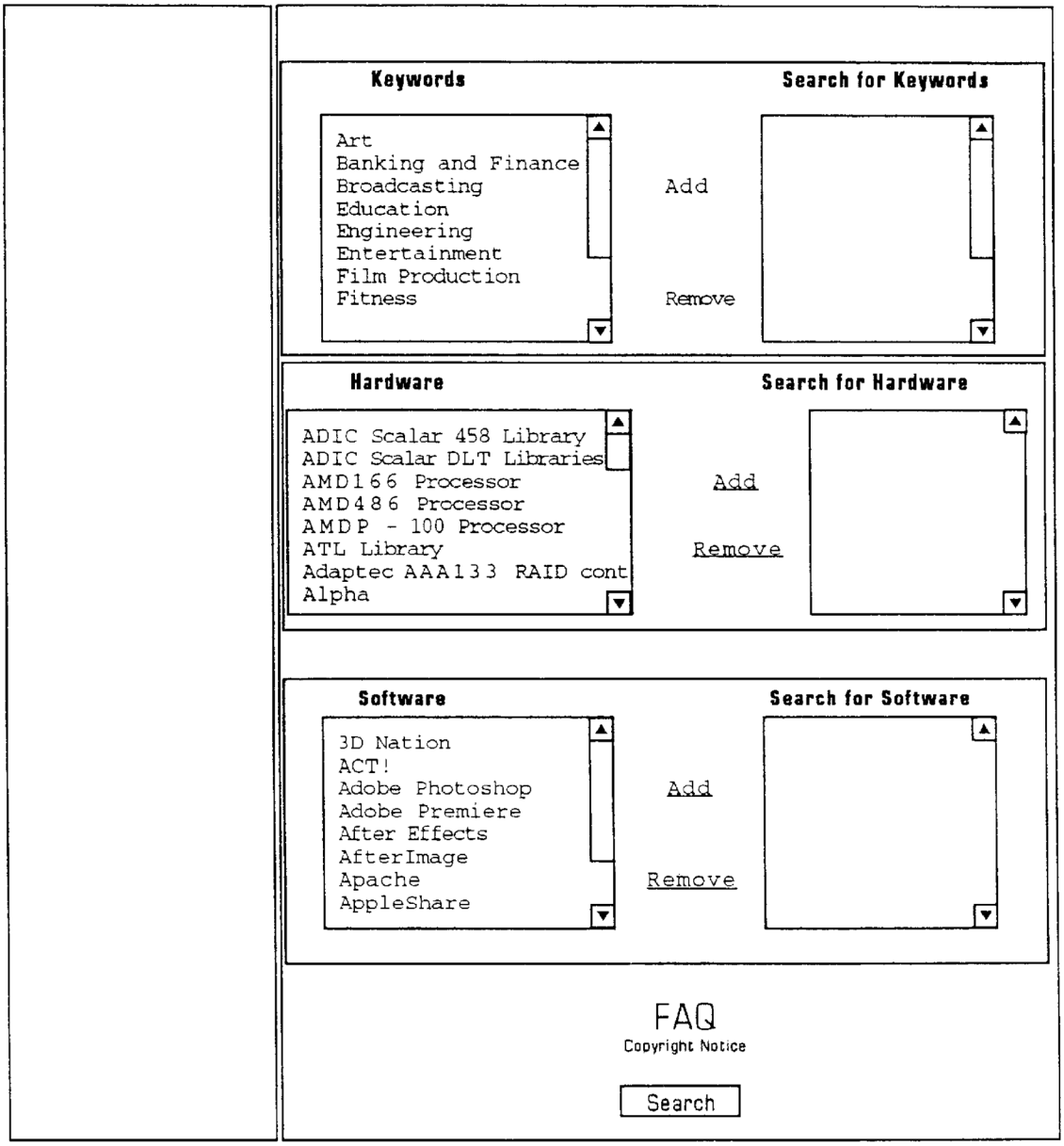

FIGURE 11B

Figure 11B, reproduced above, is a diagram "illustrating an example of a user interface page for searching stories within [Ziff's] system." Ex. 1004, 4:60–62. Figure 11B includes a search box titled "Search for Keywords" that allows for adding or removing keywords, such as "Art," "banking and Finance," and "Fitness."

Based on this disclosure, Petitioner submits that Ziff "teaches, or at least renders obvious, the electronic filter applies criteria identifying a media submission's subject matter (e.g., information about the submitter's story which were input into the fields of Figure 2C)." Pet. 78–79.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 7.

13. Claim 10

Claim 10 depends from claim 1 and further recites, "wherein the electronic filter applies criteria identifying a media submission's title." Ex. 1001, 40:27–29.

In challenging this claim, Petitioner references its challenge to limitations 1(b) and 1(c)(2). Pet. 79. Petitioner further submits that Ziff "teaches, or at least renders obvious, its search page can filter criteria based on 'Storyname' as shown in Figure 11A." *Id.* We reproduce Ziff's Figure 11A, below:

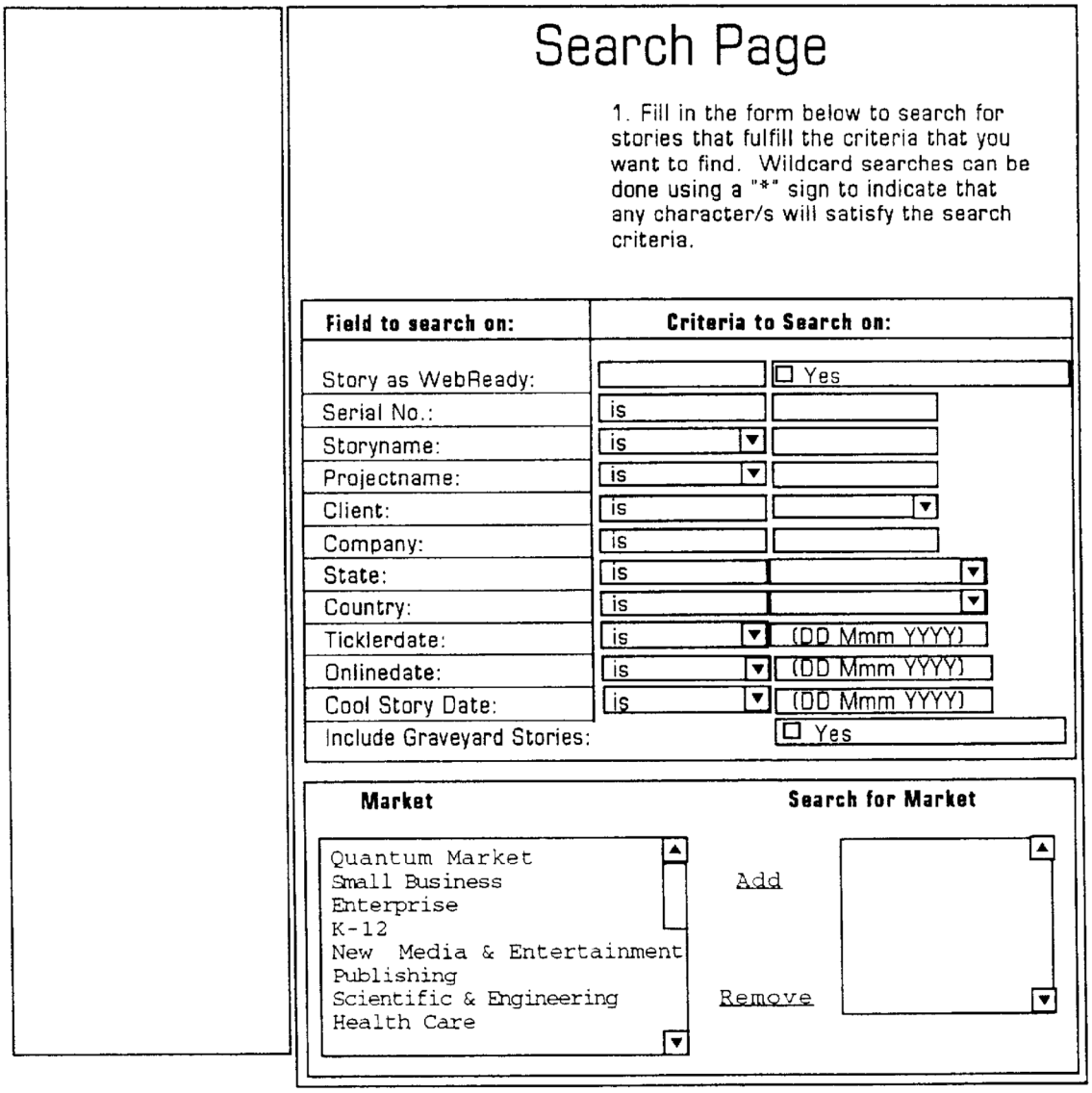

FIGURE 11A

Figure 11A, reproduced above and like Figure 11B, is a diagram "illustrating an example of a user interface page for searching stories within [Ziff's] system." Ex. 1004, 4:60–62. Figure 11A includes several search fields, including "state," "Storyname," and "Company."

Based on the disclosure of Figure 11A, Petitioner submits that Ziff's electronic filter applies criteria identifying a media submission's title, such as "Storyname." *See* Pet. 80.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 10.

14. Claim 11

Claim 11 depends from claim 1 and further recites, "wherein the electronic filter applies criteria identifying a media submission's text." Ex. 1001, 40:30–32.

In addressing this claim, Petitioner references its challenge to limitations 1(b) and 1(c)(2). Pet. 81. Petitioner further submits that Ziff "teaches, or at least renders obvious, its search page can filter criteria based on keywords from a submission's text as shown in Figure 11B." *Id.* Based on Ziff's Figure 11B, Petitioner submits that Ziff's electronic filter applies criteria identifying a media submission's text, such as the keywords in a submission's text. *See id.* at 82.

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, we find that Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 11.

15. Claim 12

Claim 12 depends from claim 1 and further recites, "wherein the electronic filter applies criteria identifying a media submission's time of submission." Ex. 1001, 40:33–35.

To address this claim, Petitioner submits that Ferrel "teaches a computerized system where users of a multimedia publishing system (MPS) are able to search for content." Pet. 83 (citing Ex. 1006, 4:25–5:40, 39:16–19). Petitioner further submits that Ferrel specifically teaches that as its "stories are received at the MSN [Microsoft Network] data center, they are stamped with the Greenwich Mean Time (GMT) time of their arrival[so t]he publisher can specify the publish date and time as a property to the story before publishing." *Id.* (quoting Ex. 1006, 40:43–53; citing also Ex. 1006, 22:39–62 (teaching search objects in the multimedia publishing system include "CreatedTime=<CreatedTime><space><Zero terminated string in yyyy/mm/dd **hh:mm::ss** format>")).

Based on these teachings, Petitioner reasons that a skilled artisan "would have been motivated to combine Ferrel's timestamp with the Ziff-Saito system with a reasonable expectation of success and without undue experimentation—*specifically to enhance the Ziff-Saito searching capabilities*, as taught by Ferrel." *Id.* (citations omitted) (emphasis replaced).

Patent Owner argues that the proposed combination would fail to satisfy this limitation. *See* PO Resp. 29–30. As to the particular challenge involving claim 12, Mr. Zatkovich testifies that

> For at least the reasons discussed above in connection with why the combination of Ziff-Saito and Ferrel would not be obvious, and more particularly, those at paragraphs 52-54, and

> 71-82 addressing how Ferrel does not demonstrate or motivate searching according to a timestamp containing a particular time, in my opinion the additionally recited feature of claim 12 of "the electronic filter applies criteria identifying a media submission's time of submission," in the context of the invention specified in claim 1, is neither shown nor rendered obvious by the cited references.

Ex. 2001 ¶ 82.

We disagree with Patent Owner and do not find credible Mr. Zatkovich's testimony. As discussed above in connection with claim 1, we find more credible Petitioner's expert regarding the teachings of Ziff, Saito, and Ferrel. *See supra* § II.D.6. In particular, based on the teachings of Ziff and Ferrel, we agree with and credit Dr. Neuman's testimony that a skilled artisan "would have recognized that using a timestamp such as Ferrel's, which stores the submission time as well as the submission date, would have been one common way to implement Ziff's 'predetermined time period.'" Ex. 1003 ¶ 118 (emphasis omitted). We further credit Dr. Neuman's testimony that timestamps were well-known in the art at the time of the invention and that "Ziff's 'predetermined time period' could not only be measured in days (such as the submission date in Ziff) but also in hours, minutes, or seconds" and that "[m]easuring Ziff's 'predetermined time period' in hours, for example, instead of days would have allowed for *more accurate updates* to Ziff's status page." *Id.* (emphasis replaced).

Having weighed the evidence and competing testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 12.

16. Claim 15

Claim 15 depends from claim 1 and further recites, "wherein the electronic filter applies criteria defined by keywords." Ex. 1001, 40:43–44.

To address this claim, Petitioner references its challenge to limitations 1(b) and 1(c)(2). Pet. 84. Petitioner submits that Ziff's "search page allows for submissions to be searched based on keywords as shown in Figure 11B." *Id.*

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 15.

17. Claim 16

Claim 16 depends from claim 1 and further recites, "wherein the electronic filter applies criteria defined by Boolean logic." Ex. 1001, 40:45–46.

Petitioner submits that Ziff teaches that its "search page may provide one or more different criteria which may be used for the purposes of searching the database for a matching story," and that Figures 11A and 11B "provide exemplary search criteria," as explained above in connection with limitation 1(b). Pet. 86 (citing Ex. 1004, 13:21–26). Petitioner submits that Figure 11A teaches "[w]ildcard searches can be done using a '*' sign to indicate that any character/s will satisfy the search criteria." *Id.* (alteration in original).

Dr. Neuman testifies that a skilled artisan "would have understood that *Ziff*'s teaching specifically relate to using an 'AND' operator for more than one key word—as well as using the wildcard asterisk operator—teaches that *the electronic filter applies criteria defined by Boolean logic*." Ex. 1003 ¶ 193.

Petitioner further points out that Ferrel discloses, "Once the Boolean logic is resolved, it is inconsequential what order these terms are parsed in." Pet. 86 (quoting Ex. 1006, 40:30–32). Based on Ferrel's teachings, Petitioner further reasons that a skilled artisan "would have been motivated to combine the Ziff-Saito system with Ferrel with a reasonable expectation of success and without undue experimentation—specifically to enhance searching capabilities, as taught by Ferrel." *Id.* (emphasis omitted).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 16.

18. Claim 21

Claim 21 depends from claim 1 and further recites, "wherein the submissions electronic interface is configured to receive a third electronic media submission from the first user of a plurality of users over a public network and store said third electronic media submission in said one or more databases." Ex. 1001, 40:63–67.

To address claim 21, Petitioner references its challenge to limitation 1(a)(3) and submits that Ziff "contemplates that one person may submit

more than one submission." Pet. 87 (citing Ex. 1004, 5:30–35 ("different people may include one **or** more people **who submit stories** to the system (Submitter #1–Submitter #N)."). Based on this teaching, Dr. Neuman testifies that a skilled artisan "would have understood that one submitter may submit multiple submissions, including at least three submissions. Ziff also teaches submissions are stored in database 40, and submitter computers are connected to server 22 by the Internet." Ex. 1003 ¶ 198 (citing Ex. 1004, 5:19–24, 6:13–17) (emphasis omitted).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 21.

19. Claim 22

Claim 22 depends from claim 1 and further recites, "wherein the submissions electronic interface is configured to receive a third electronic media submission from a third user of the plurality of users over a public network and store said third electronic media submission in said one or more databases and the third user is not the first user." Ex. 1001, 41:1–6.

To address claim 22, Petitioner references its challenge to limitation 1(a)(3) and submits that Ziff "contemplates an undefined number of users who may each submit a submission." Pet. 87 (citing Ex. 1004, 5:30–35). Ziff discloses, "different people may include one or more people who submit stories to the system (Submitter #1–Submitter #N)." Ex. 1004, 5:30–35. Dr.

Neuman testifies that a skilled artisan "would have understood that this may have included at least three submitters, each submitting a submission" and that Ziff "also teaches submissions are stored in database 40, and submitter computers are connected to server 22 by the Internet." Ex. 1003 ¶ 201 (citing Ex. 1004, 5:19–24, 6:13–17).

Patent Owner does not present any additional argument addressing these limitations.

Having weighed the evidence and testimony, Petitioner has demonstrated by a preponderance of the evidence that Ziff, as modified based on Saito's and Ferrel's teachings, satisfy the limitations recited in claim 22.

20. Summary of Claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22

Petitioner has demonstrated by a preponderance of the evidence that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 would have been obvious over the combination of Ziff, Saito, and Ferrel.

III. CONCLUSION

After weighing the evidence of the disclosure of the references, the testimony, and the reasoning to combine the references, Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 would have been obvious over the combination of Ziff, Saito, and Ferrel.

Claim(s)	35 U.S.C. §	Reference(s)/Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1, 2, 4–7, 10–12, 15, 16, 21, 22	103	Ziff, Saito, Ferrel	1, 2, 4–7, 10–12, 15, 16, 21, 22	

IV. ORDER

Accordingly, it is:

ORDERED that claims 1, 2, 4–7, 10–12, 15, 16, 21, and 22 of the '576 patent have been shown to be unpatentable; and

FURTHER ORDERED that any party seeking judicial review must comply with the notice and service requirements of 37 C.F.R. § 90.2.[4]

[4] Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

IPR2022-01263
Patent 10,339,576 B2

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US010339576B2

(12) **United States Patent**
Tota et al.

(10) **Patent No.: US 10,339,576 B2**
(45) **Date of Patent: *Jul. 2, 2019**

(54) **REVENUE-GENERATING ELECTRONIC MULTI-MEDIA EXCHANGE AND PROCESS OF OPERATING SAME**

(71) Applicant: **VIRTUAL CREATIVE ARTISTS, LLC**, Bell Canyon, CA (US)

(72) Inventors: **Michael J. Tota**, Bell Canyon, CA (US); **Kenneth T. Tota**, Alexandria, VA (US); **Mark S. Tota**, Horseheads, NY (US); **Ian D. Cohen**, Encino, CA (US)

(73) Assignee: **VIRTUAL CREATIVE ARTISTS, LLC**, Bell Canyon, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 257 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/261,814**

(22) Filed: **Sep. 9, 2016**

(65) **Prior Publication Data**

US 2017/0098260 A1 Apr. 6, 2017

Related U.S. Application Data

(63) Continuation of application No. 13/679,659, filed on Nov. 16, 2012, now Pat. No. 9,477,665, which is a (Continued)

(51) **Int. Cl.**
G06Q 30/08 (2012.01)
G06Q 30/06 (2012.01)
(Continued)

(52) **U.S. Cl.**
CPC ***G06Q 30/0601*** (2013.01); ***G06F 16/435*** (2019.01); ***G06F 16/9535*** (2019.01);
(Continued)

(58) **Field of Classification Search**
CPC G06Q 10/00; G06Q 40/00; G06F 17/60
(Continued)

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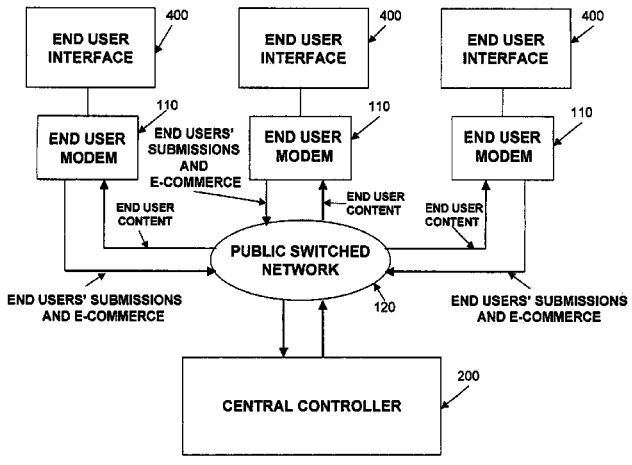
Primary Examiner — Romain Jeanty
(74) *Attorney, Agent, or Firm* — One LLP; Joseph K. Liu

(57) **ABSTRACT**

In a process for creating media content, media submissions are requested and electronically received from end users and stored in a computer database. The submissions are searched for material to be included in the media content, and cross-checked against the other submissions for originality and timeliness. After the material is selected from one or more submissions, the content is developed and released to an audience for review. The end users whose submission material was included in the released content are rewarded. In one embodiment, third parties are permitted to access and search the submissions on an open exchange. The third parties can bid for rights in submissions on the open exchange. After receiving these bids, they are forwarded to the particular submission's end user for acceptance or rejection. Appropriate billing and payment processes are used to bill and pay the parties involved.

22 Claims, 34 Drawing Sheets



Related U.S. Application Data

continuation of application No. 11/978,781, filed on Oct. 30, 2007, now Pat. No. 8,340,994, which is a continuation of application No. 09/565,438, filed on May 5, 2000, now Pat. No. 7,308,413.

(60) Provisional application No. 60/133,247, filed on May 5, 1999.

(51) **Int. Cl.**

G06F 16/435	(2019.01)
G06F 16/9535	(2019.01)
G07C 13/00	(2006.01)
G06F 17/21	(2006.01)
G06F 16/43	(2019.01)

(52) **U.S. Cl.**

CPC ***G06F 17/21*** (2013.01); ***G06Q 30/08*** (2013.01); ***G07C 13/00*** (2013.01); *G06F 16/43* (2019.01)

(58) **Field of Classification Search**

USPC 705/7.12

See application file for complete search history.

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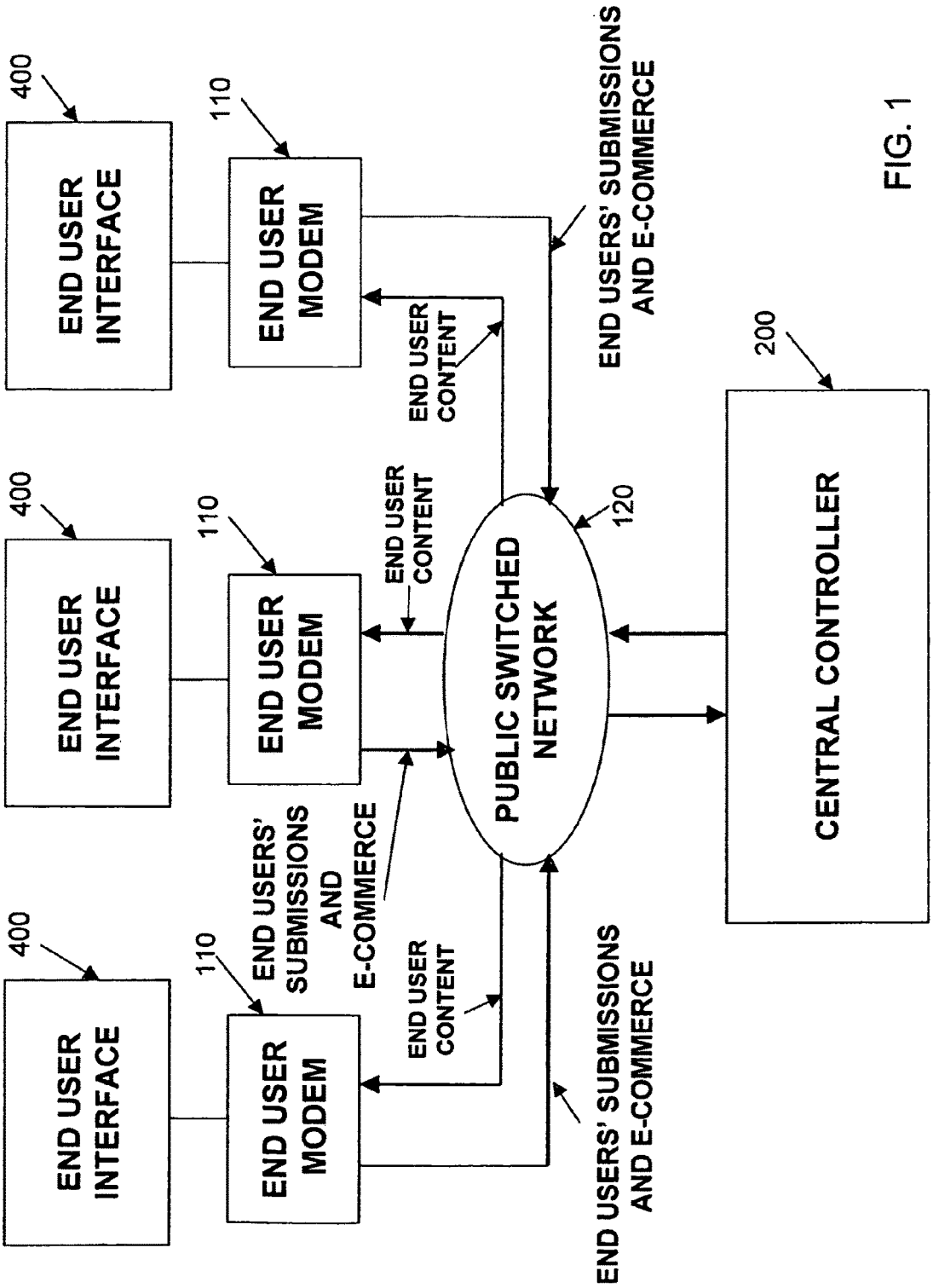
400
END USER INTERFACE
110
END USER MODEM
END USER CONTENT
END USERS' SUBMISSIONS AND E-COMMERCE
200
CENTRAL CONTROLLER
120
PUBLIC SWITCHED NETWORK
END USERS' SUBMISSIONS AND E-COMMERCE

FIG. 1

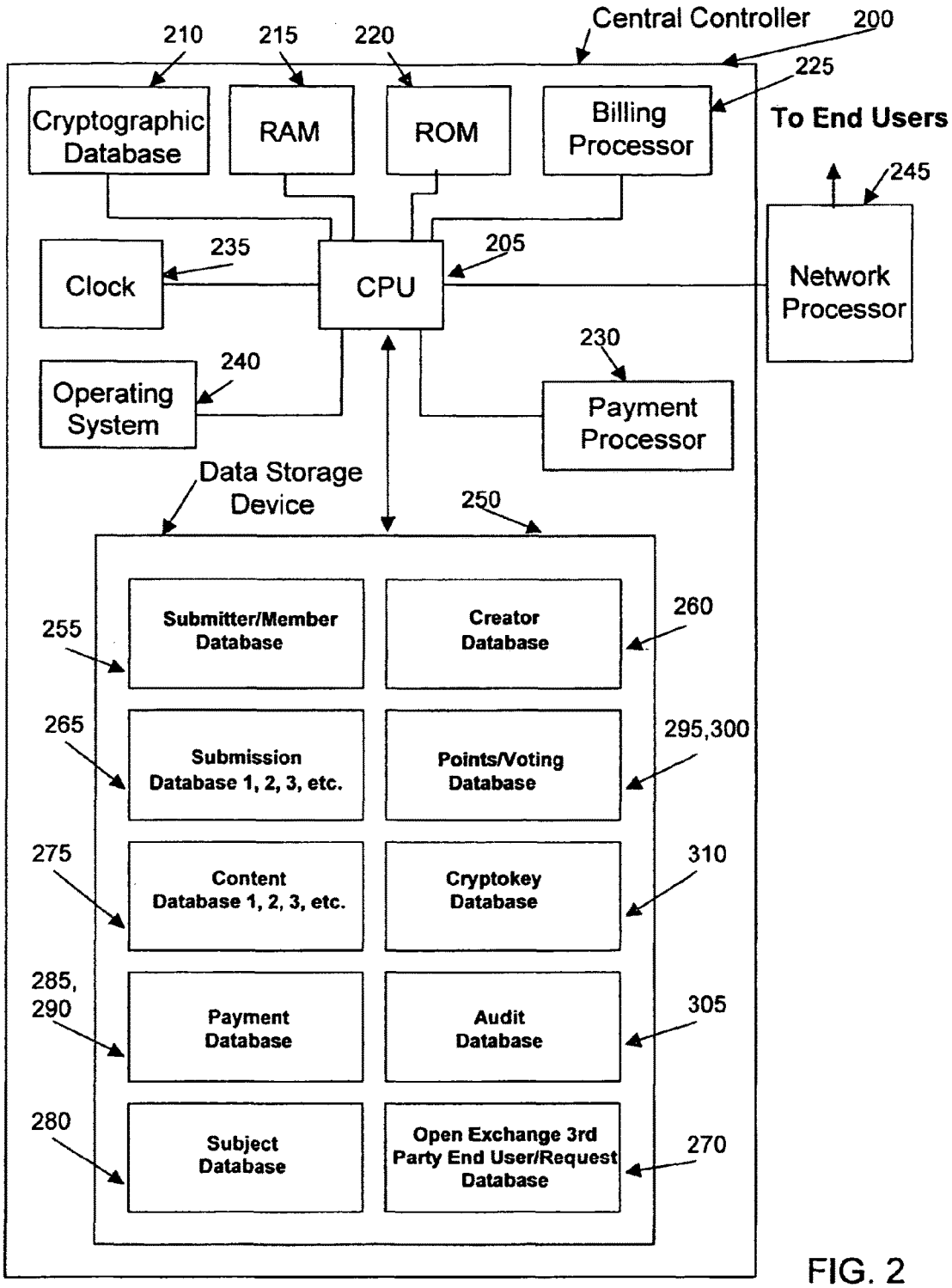
Central Controller
200
210
215
220
225
Cryptographic Database
RAM
ROM
Billing Processor
To End Users
245
Network Processor
235
205
Clock
CPU
230
240
Operating System
Payment Processor
Data Storage Device
250
255
Submitter/Member Database
Creator Database
260
265
Submission Database 1, 2, 3, etc.
Points/Voting Database
295,300
275
Content Database 1, 2, 3, etc.
Cryptokey Database
310
285, 290
Payment Database
Audit Database
305
280
Subject Database
Open Exchange 3rd Party End User/Request Database
270

FIG. 2

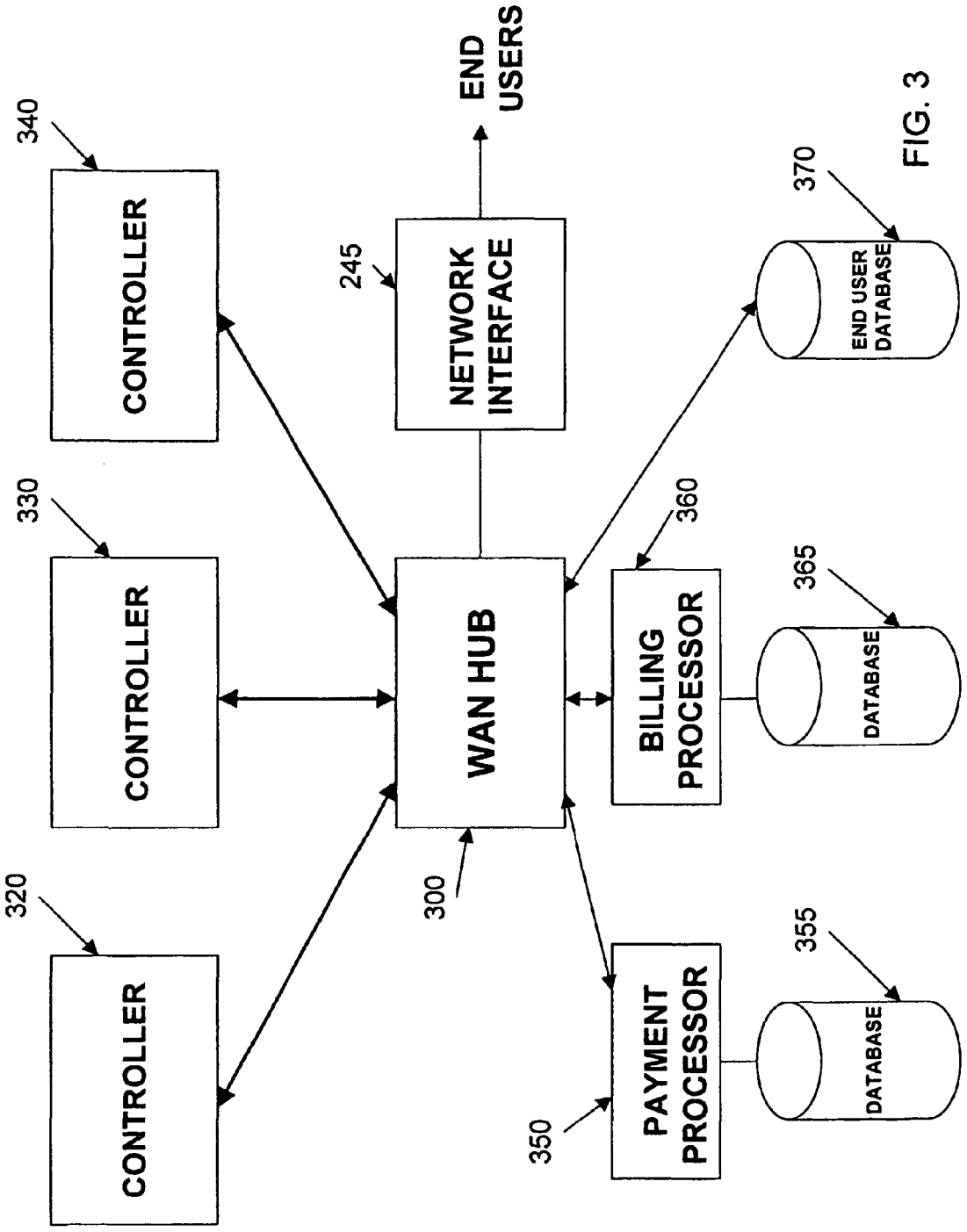
END USERS
340
CONTROLLER
330
CONTROLLER
320
CONTROLLER
245
NETWORK INTERFACE
WAN HUB
300
370
END USER DATABASE
360
BILLING PROCESSOR
365
DATABASE
PAYMENT PROCESSOR
350
355
DATABASE

FIG. 3

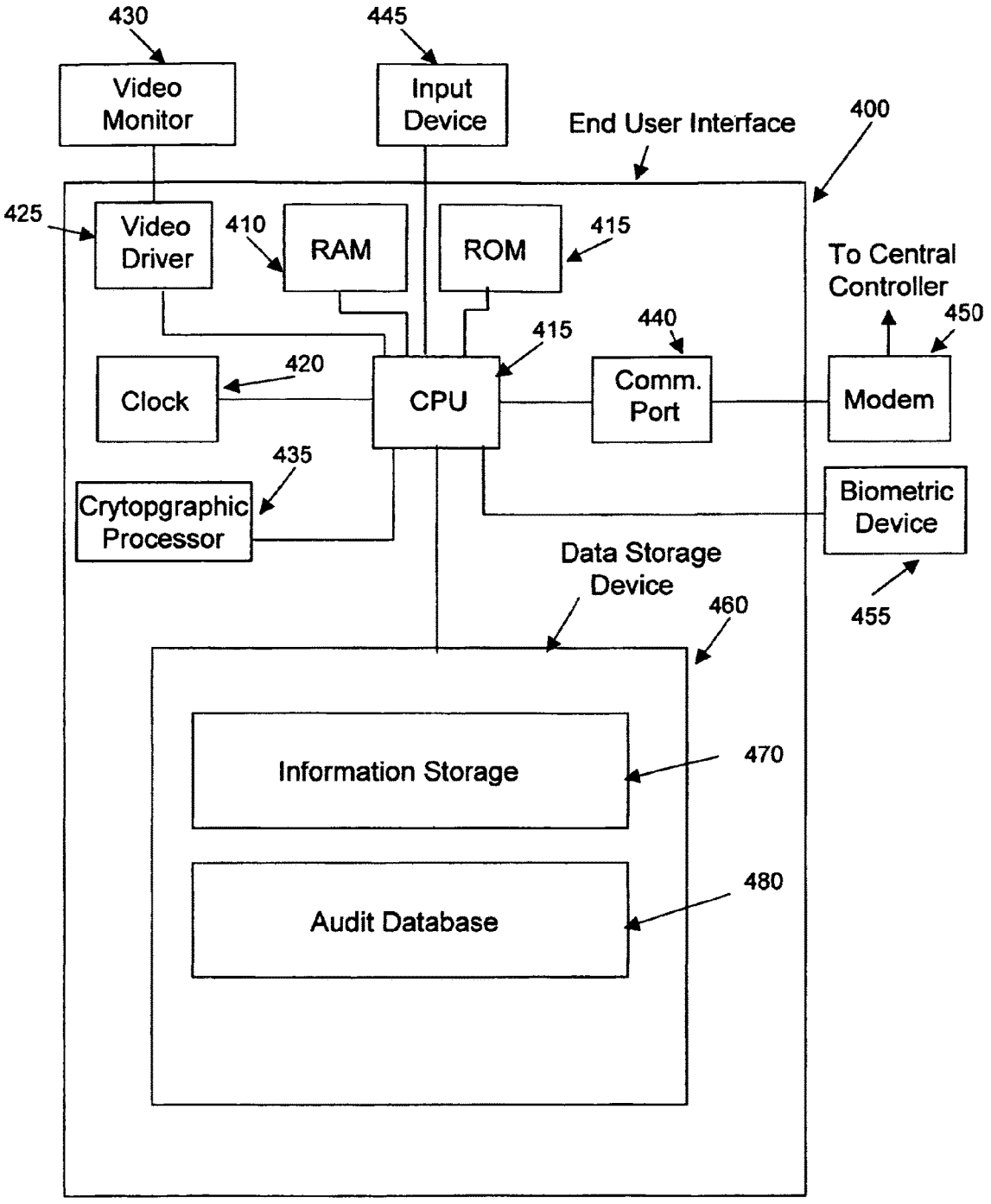
430
Video Monitor
445
Input Device
End User Interface
400
425
Video Driver
410
RAM
ROM
415
To Central Controller
450
415
440
Clock
420
CPU
Comm. Port
Modem
435
Crytopgraphic Processor
Biometric Device
Data Storage Device
460
455
Information Storage
470
Audit Database
480

FIG. 4

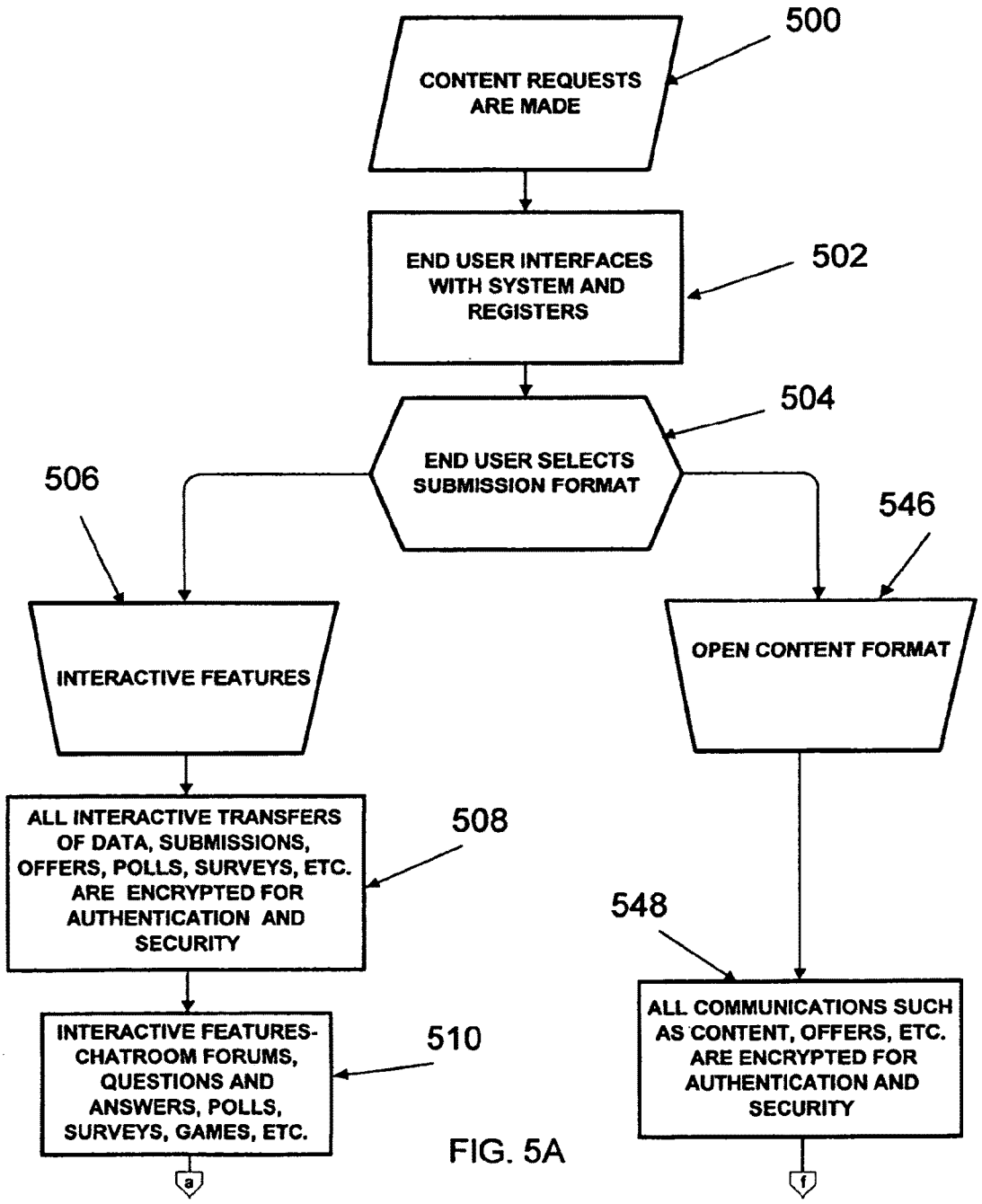
500
CONTENT REQUESTS ARE MADE
END USER INTERFACES WITH SYSTEM AND REGISTERS
502
504
END USER SELECTS SUBMISSION FORMAT
506
546
INTERACTIVE FEATURES
OPEN CONTENT FORMAT
ALL INTERACTIVE TRANSFERS OF DATA, SUBMISSIONS, OFFERS, POLLS, SURVEYS, ETC. ARE ENCRYPTED FOR AUTHENTICATION AND SECURITY
508
548
INTERACTIVE FEATURES- CHATROOM FORUMS, QUESTIONS AND ANSWERS, POLLS, SURVEYS, GAMES, ETC.
510
ALL COMMUNICATIONS SUCH AS CONTENT, OFFERS, ETC. ARE ENCRYPTED FOR AUTHENTICATION AND SECURITY
a
f

FIG. 5A

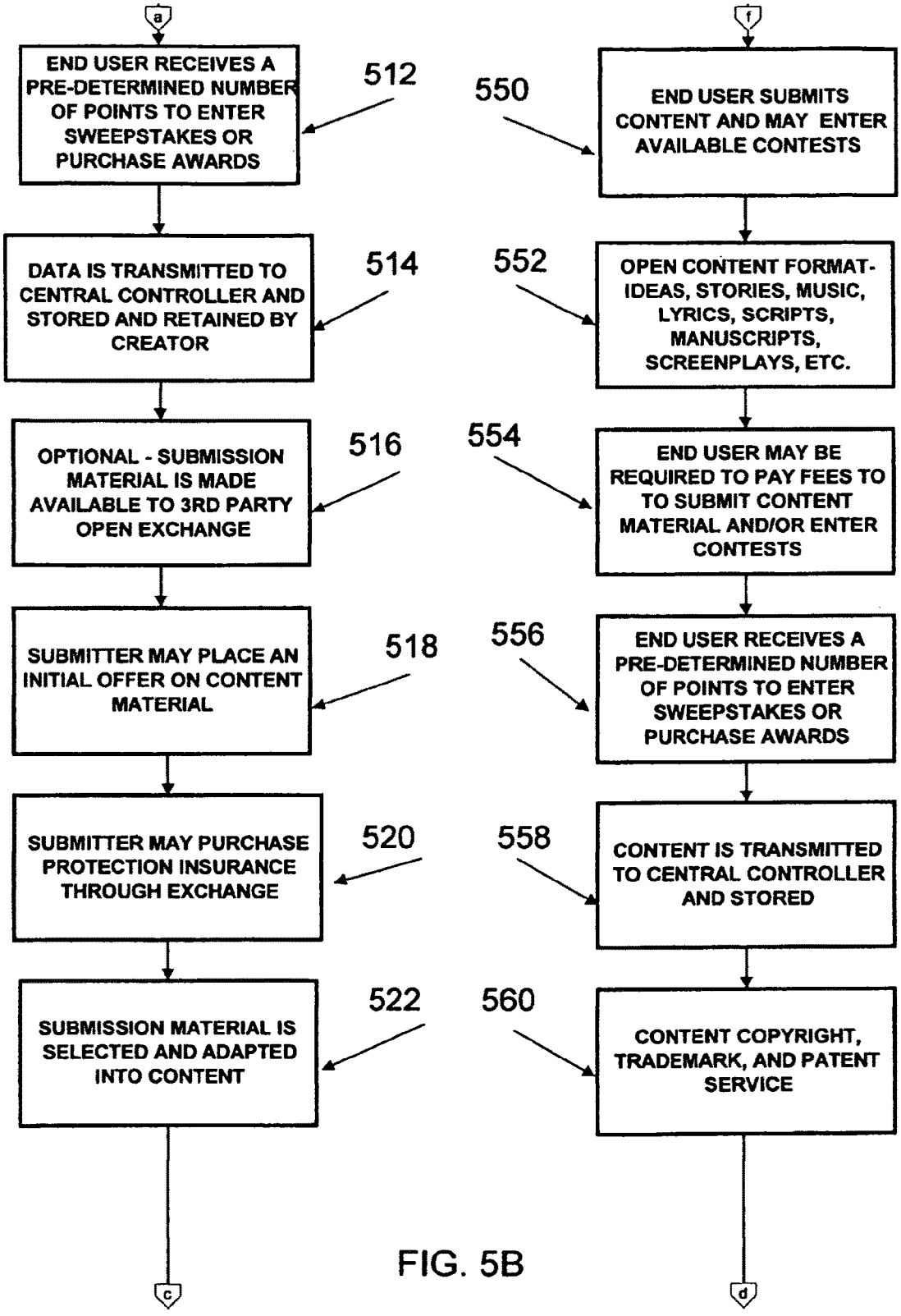
a
END USER RECEIVES A PRE-DETERMINED NUMBER OF POINTS TO ENTER SWEEPSTAKES OR PURCHASE AWARDS
512
DATA IS TRANSMITTED TO CENTRAL CONTROLLER AND STORED AND RETAINED BY CREATOR
514
OPTIONAL - SUBMISSION MATERIAL IS MADE AVAILABLE TO 3RD PARTY OPEN EXCHANGE
516
SUBMITTER MAY PLACE AN INITIAL OFFER ON CONTENT MATERIAL
518
SUBMITTER MAY PURCHASE PROTECTION INSURANCE THROUGH EXCHANGE
520
SUBMISSION MATERIAL IS SELECTED AND ADAPTED INTO CONTENT
522
c
f
550
END USER SUBMITS CONTENT AND MAY ENTER AVAILABLE CONTESTS
552
OPEN CONTENT FORMAT-IDEAS, STORIES, MUSIC, LYRICS, SCRIPTS, MANUSCRIPTS, SCREENPLAYS, ETC.
554
END USER MAY BE REQUIRED TO PAY FEES TO TO SUBMIT CONTENT MATERIAL AND/OR ENTER CONTESTS
556
END USER RECEIVES A PRE-DETERMINED NUMBER OF POINTS TO ENTER SWEEPSTAKES OR PURCHASE AWARDS
558
CONTENT IS TRANSMITTED TO CENTRAL CONTROLLER AND STORED
560
CONTENT COPYRIGHT, TRADEMARK, AND PATENT SERVICE
d

FIG. 5B

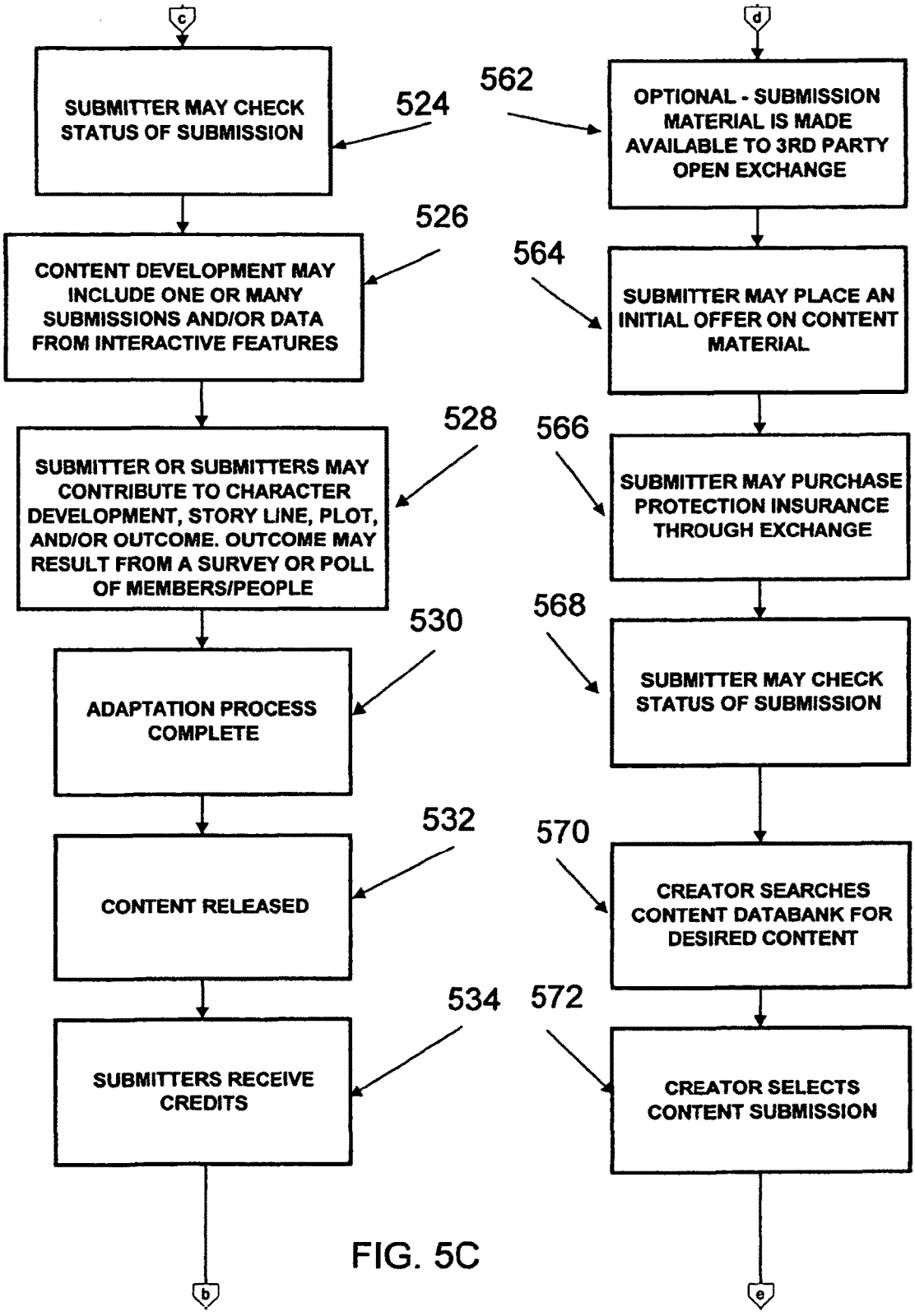
c
SUBMITTER MAY CHECK STATUS OF SUBMISSION
524
CONTENT DEVELOPMENT MAY INCLUDE ONE OR MANY SUBMISSIONS AND/OR DATA FROM INTERACTIVE FEATURES
526
SUBMITTER OR SUBMITTERS MAY CONTRIBUTE TO CHARACTER DEVELOPMENT, STORY LINE, PLOT, AND/OR OUTCOME. OUTCOME MAY RESULT FROM A SURVEY OR POLL OF MEMBERS/PEOPLE
528
ADAPTATION PROCESS COMPLETE
530
CONTENT RELEASED
532
SUBMITTERS RECEIVE CREDITS
534
b
d
OPTIONAL - SUBMISSION MATERIAL IS MADE AVAILABLE TO 3RD PARTY OPEN EXCHANGE
562
SUBMITTER MAY PLACE AN INITIAL OFFER ON CONTENT MATERIAL
564
SUBMITTER MAY PURCHASE PROTECTION INSURANCE THROUGH EXCHANGE
566
SUBMITTER MAY CHECK STATUS OF SUBMISSION
568
CREATOR SEARCHES CONTENT DATABANK FOR DESIRED CONTENT
570
CREATOR SELECTS CONTENT SUBMISSION
572
e

FIG. 5C

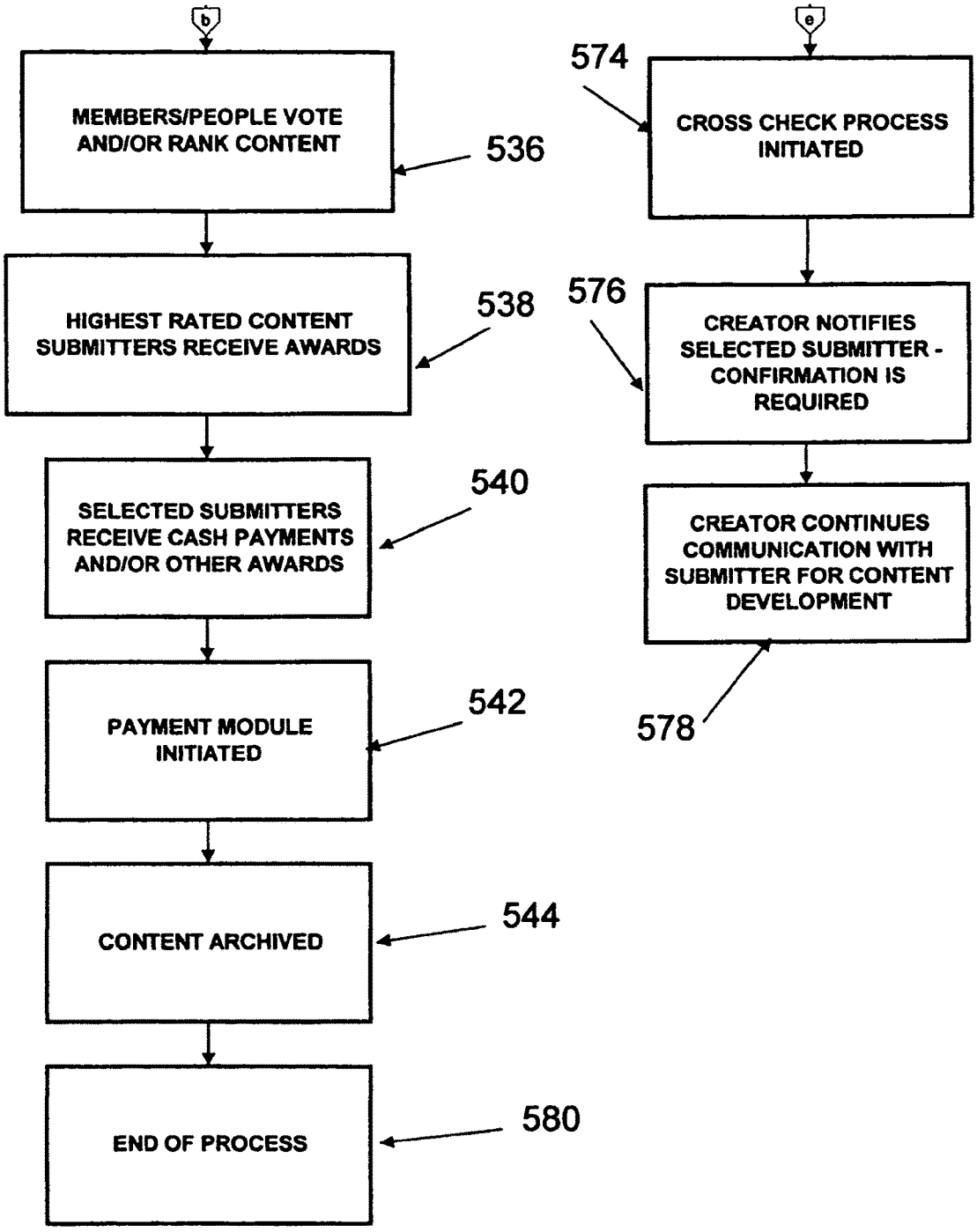
b
MEMBERS/PEOPLE VOTE AND/OR RANK CONTENT
536
HIGHEST RATED CONTENT SUBMITTERS RECEIVE AWARDS
538
SELECTED SUBMITTERS RECEIVE CASH PAYMENTS AND/OR OTHER AWARDS
540
PAYMENT MODULE INITIATED
542
CONTENT ARCHIVED
544
END OF PROCESS
580
e
574
CROSS CHECK PROCESS INITIATED
576
CREATOR NOTIFIES SELECTED SUBMITTER - CONFIRMATION IS REQUIRED
CREATOR CONTINUES COMMUNICATION WITH SUBMITTER FOR CONTENT DEVELOPMENT
578

FIG. 5D

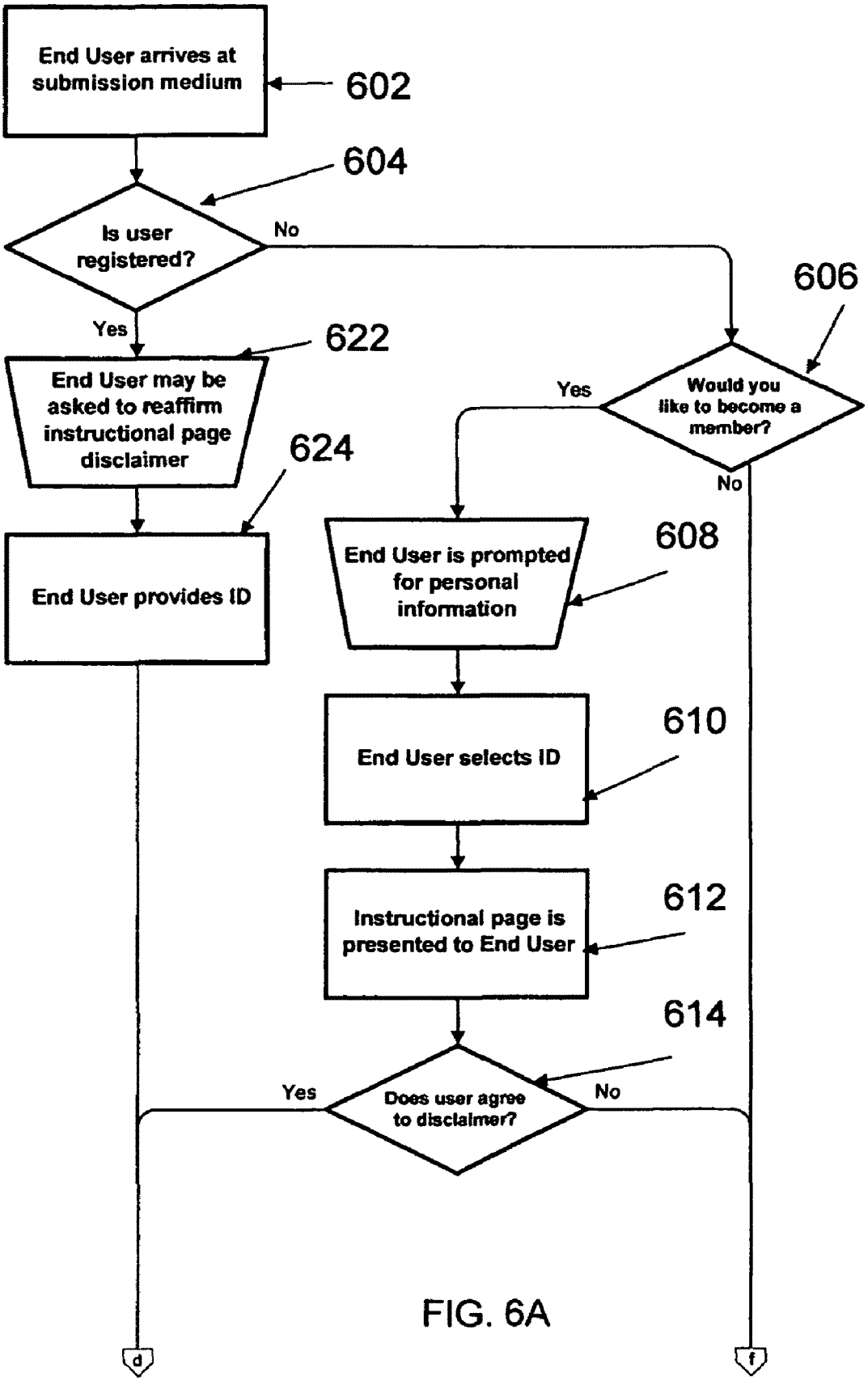
End User arrives at submission medium
602
604
Is user registered?
No
606
Yes
622
End User may be asked to reaffirm instructional page disclaimer
Yes
Would you like to become a member?
No
624
End User provides ID
End User is prompted for personal information
608
End User selects ID
610
Instructional page is presented to End User
612
614
Yes
Does user agree to disclaimer?
No
d
f

FIG. 6A

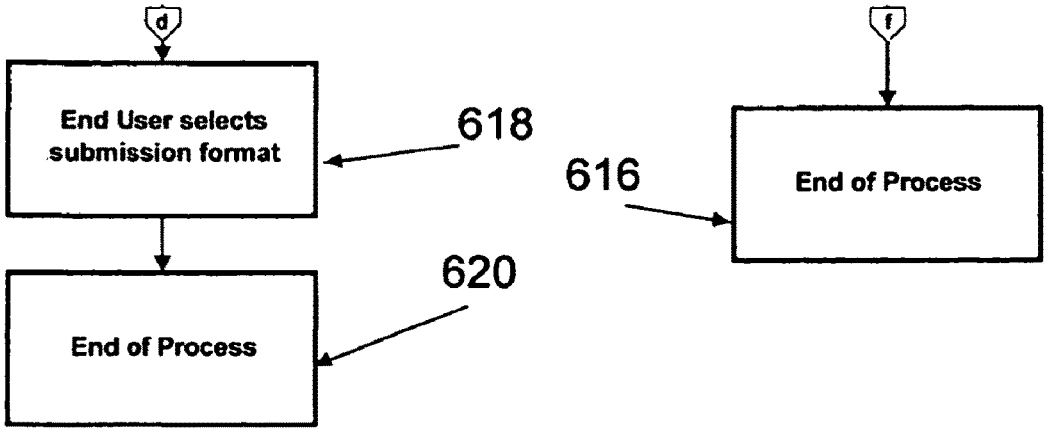
d
End User selects submission format
618
End of Process
620
f
616
End of Process

FIG. 6B

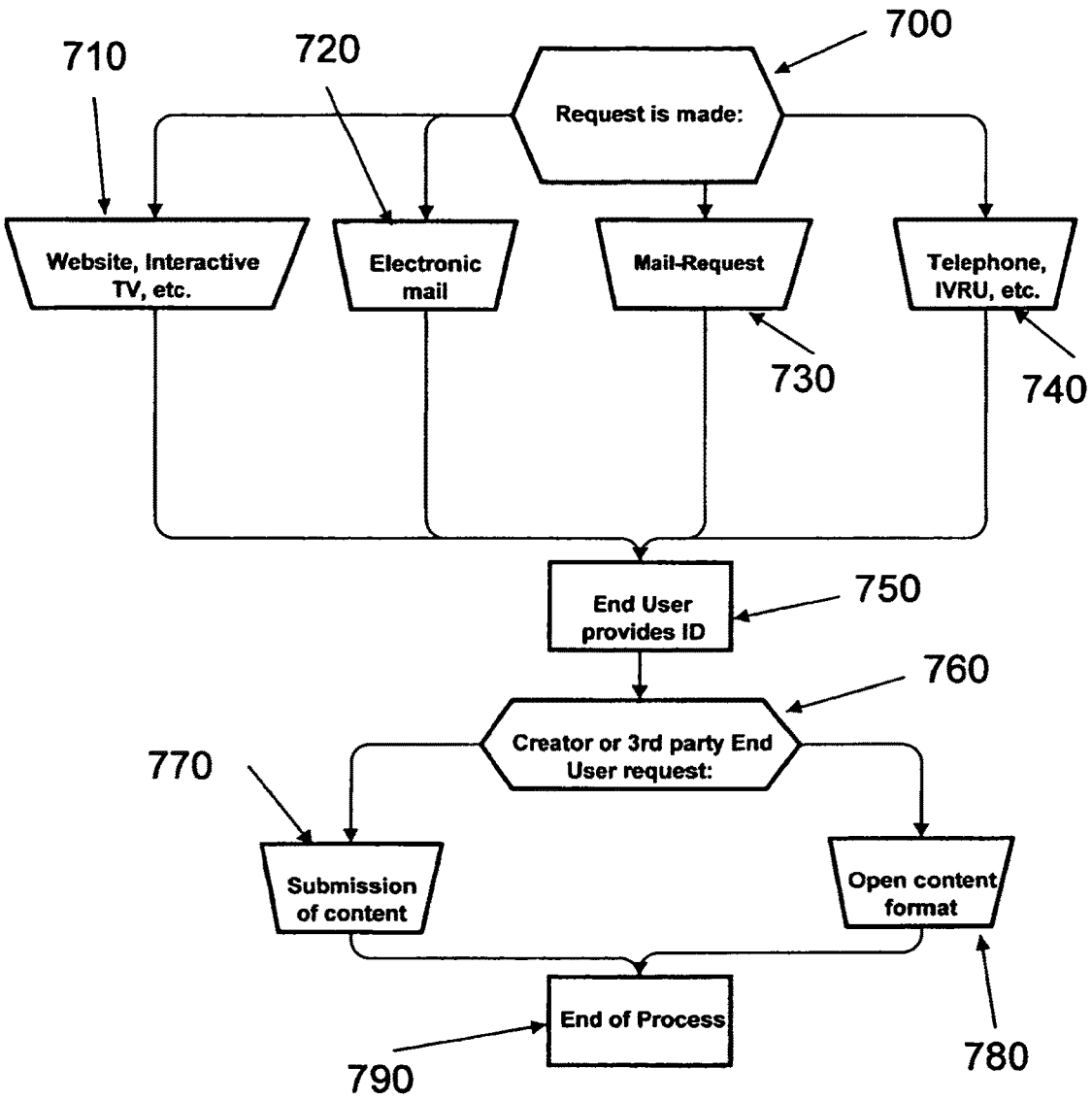
700
710
720
Request is made:
Website, Interactive TV, etc.
Electronic mail
Mail-Request
Telephone, IVRU, etc.
730
740
End User provides ID
750
760
Creator or 3rd party End User request:
770
Submission of content
Open content format
End of Process
790
780

FIG. 7

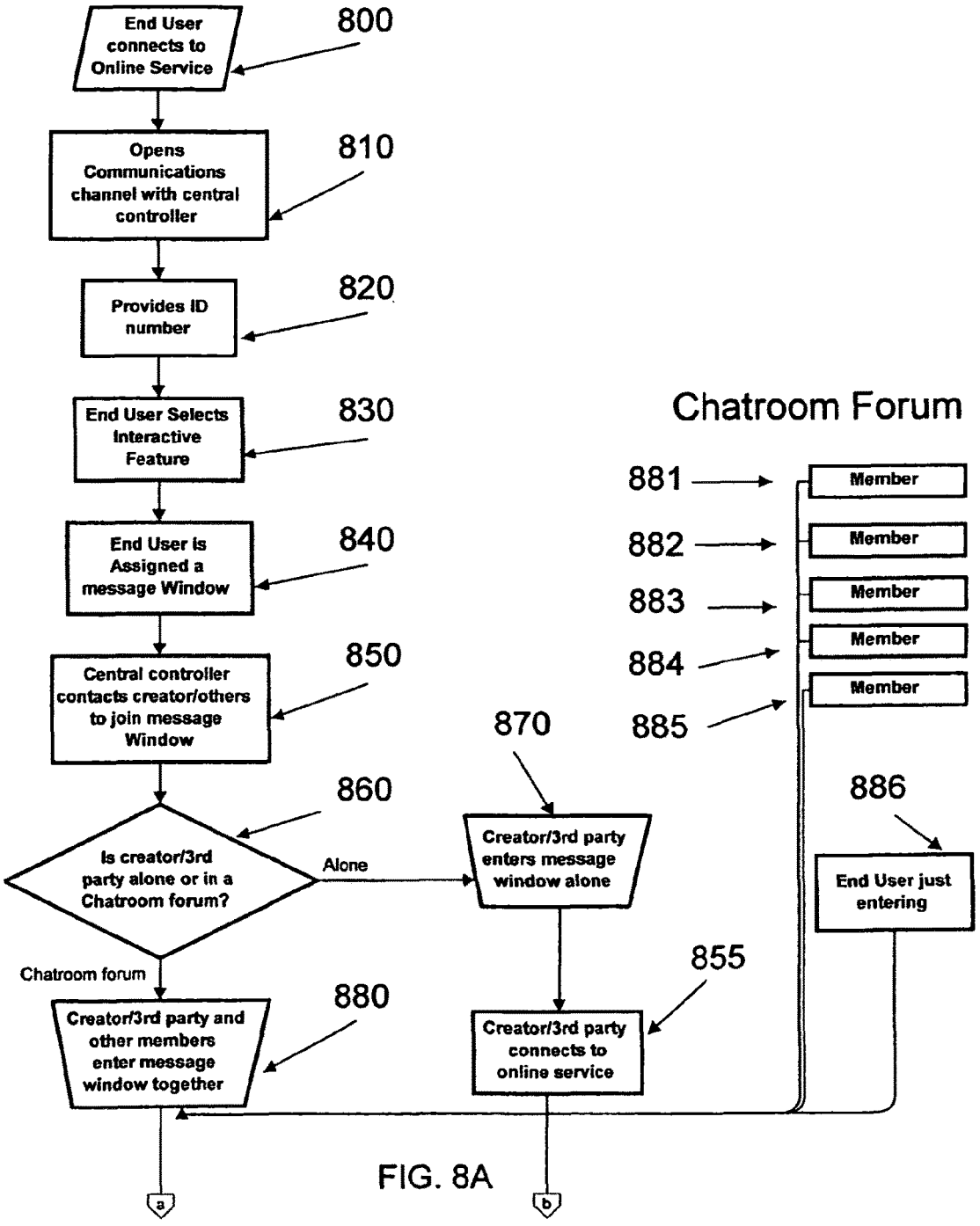
End User connects to Online Service
800
Opens Communications channel with central controller
810
Provides ID number
820
End User Selects Interactive Feature
830
End User is Assigned a message Window
840
Central controller contacts creator/others to join message Window
850
Is creator/3rd party alone or in a Chatroom forum?
860
Alone
Chatroom forum
Creator/3rd party and other members enter message window together
880
Creator/3rd party enters message window alone
870
Creator/3rd party connects to online service
855
Chatroom Forum
881
882
883
884
885
Member
Member
Member
Member
Member
886
End User just entering
a
b

FIG. 8A

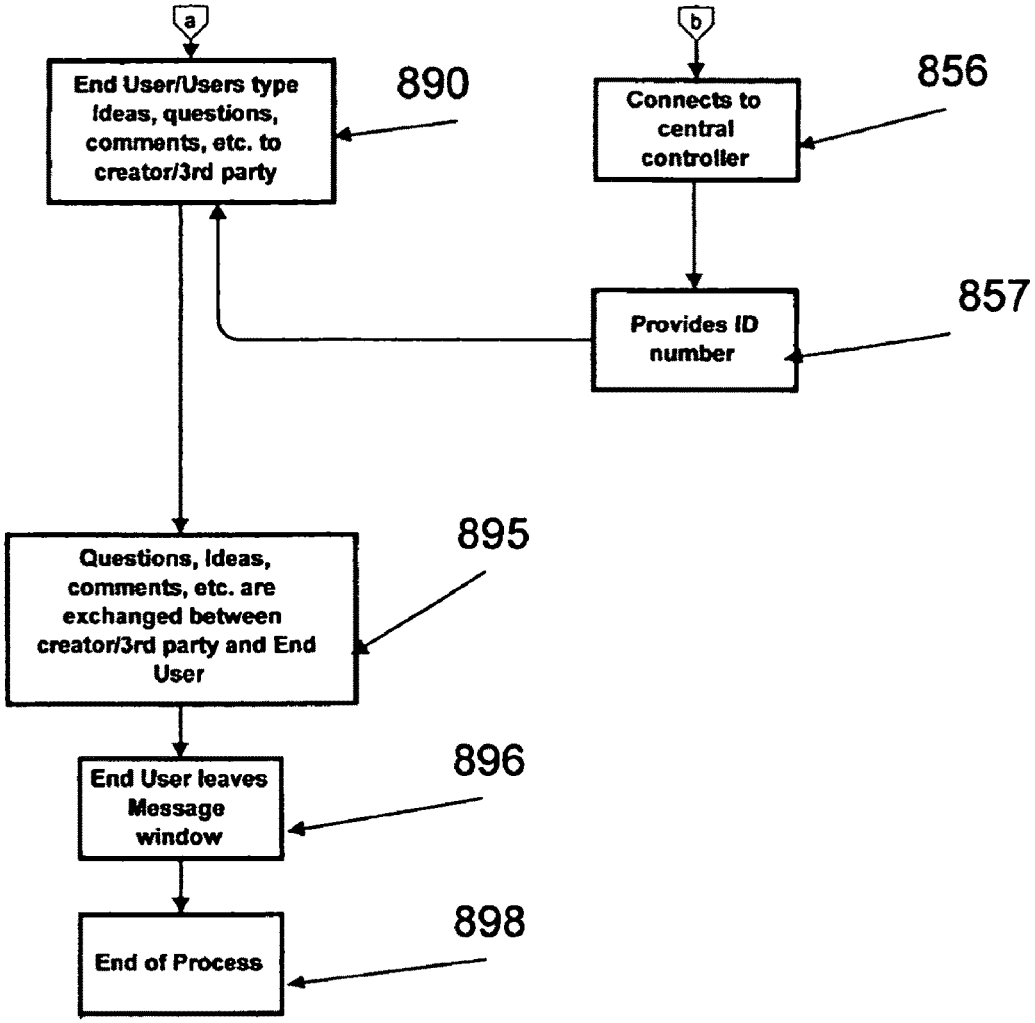
a
End User/Users type Ideas, questions, comments, etc. to creator/3rd party
890
b
Connects to central controller
856
Provides ID number
857
Questions, Ideas, comments, etc. are exchanged between creator/3rd party and End User
895
End User leaves Message window
896
End of Process
898

FIG. 8B

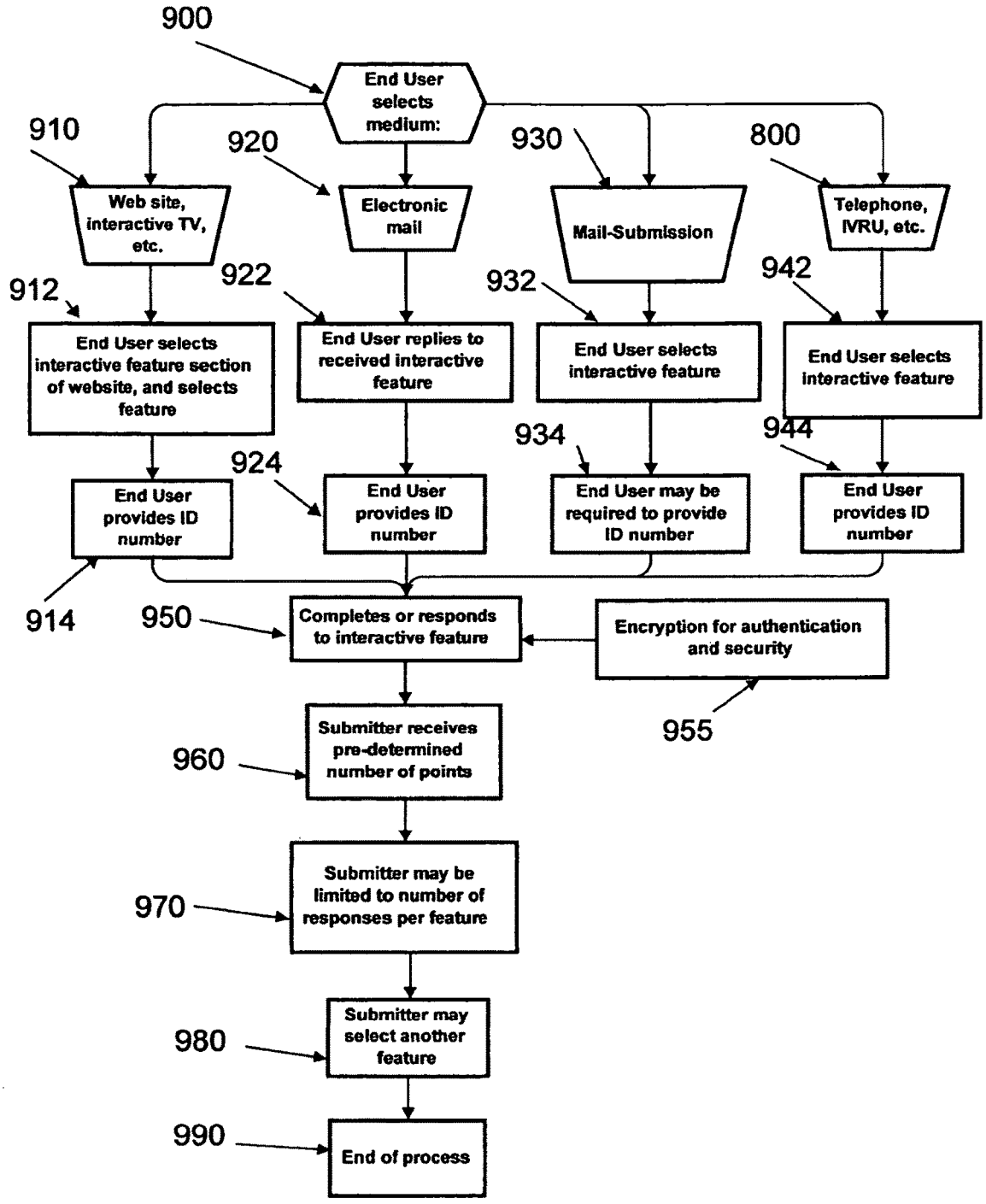
900
End User selects medium:
910
920
930
800
Web site, interactive TV, etc.
Electronic mail
Mail-Submission
Telephone, IVRU, etc.
912
922
932
942
End User selects interactive feature section of website, and selects feature
End User replies to received interactive feature
End User selects interactive feature
End User selects interactive feature
934
944
924
End User provides ID number
End User provides ID number
End User may be required to provide ID number
End User provides ID number
914
950
Completes or responds to interactive feature
Encryption for authentication and security
955
Submitter receives pre-determined number of points
960
Submitter may be limited to number of responses per feature
970
Submitter may select another feature
980
990
End of process

FIG. 9

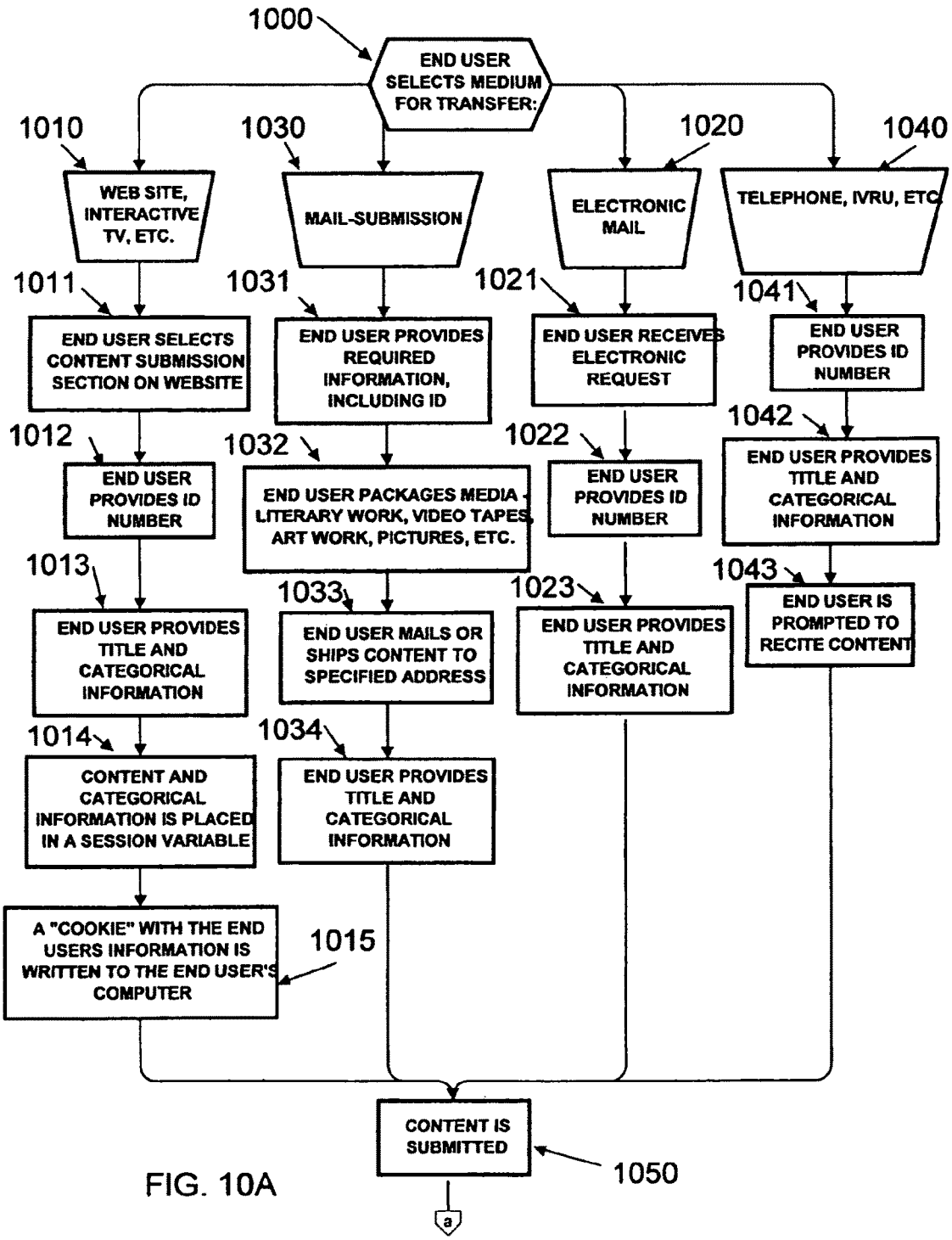
1000
END USER SELECTS MEDIUM FOR TRANSFER:
1010
WEB SITE, INTERACTIVE TV, ETC.
1030
MAIL-SUBMISSION
1020
ELECTRONIC MAIL
1040
TELEPHONE, IVRU, ETC.
1011
END USER SELECTS CONTENT SUBMISSION SECTION ON WEBSITE
1031
END USER PROVIDES REQUIRED INFORMATION, INCLUDING ID
1021
END USER RECEIVES ELECTRONIC REQUEST
1041
END USER PROVIDES ID NUMBER
1012
END USER PROVIDES ID NUMBER
1032
END USER PACKAGES MEDIA - LITERARY WORK, VIDEO TAPES, ART WORK, PICTURES, ETC.
1022
END USER PROVIDES ID NUMBER
1042
END USER PROVIDES TITLE AND CATEGORICAL INFORMATION
1013
END USER PROVIDES TITLE AND CATEGORICAL INFORMATION
1033
END USER MAILS OR SHIPS CONTENT TO SPECIFIED ADDRESS
1023
END USER PROVIDES TITLE AND CATEGORICAL INFORMATION
1043
END USER IS PROMPTED TO RECITE CONTENT
1014
CONTENT AND CATEGORICAL INFORMATION IS PLACED IN A SESSION VARIABLE
1034
END USER PROVIDES TITLE AND CATEGORICAL INFORMATION
A "COOKIE" WITH THE END USERS INFORMATION IS WRITTEN TO THE END USER'S COMPUTER
1015
CONTENT IS SUBMITTED
1050
a

FIG. 10A

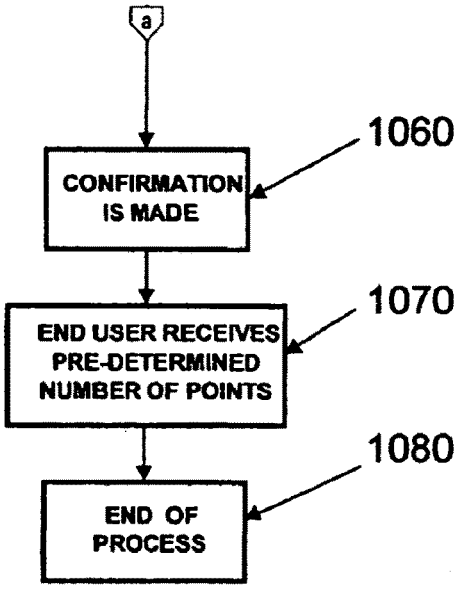
a
1060
CONFIRMATION IS MADE
1070
END USER RECEIVES PRE-DETERMINED NUMBER OF POINTS
1080
END OF PROCESS

FIG.10B

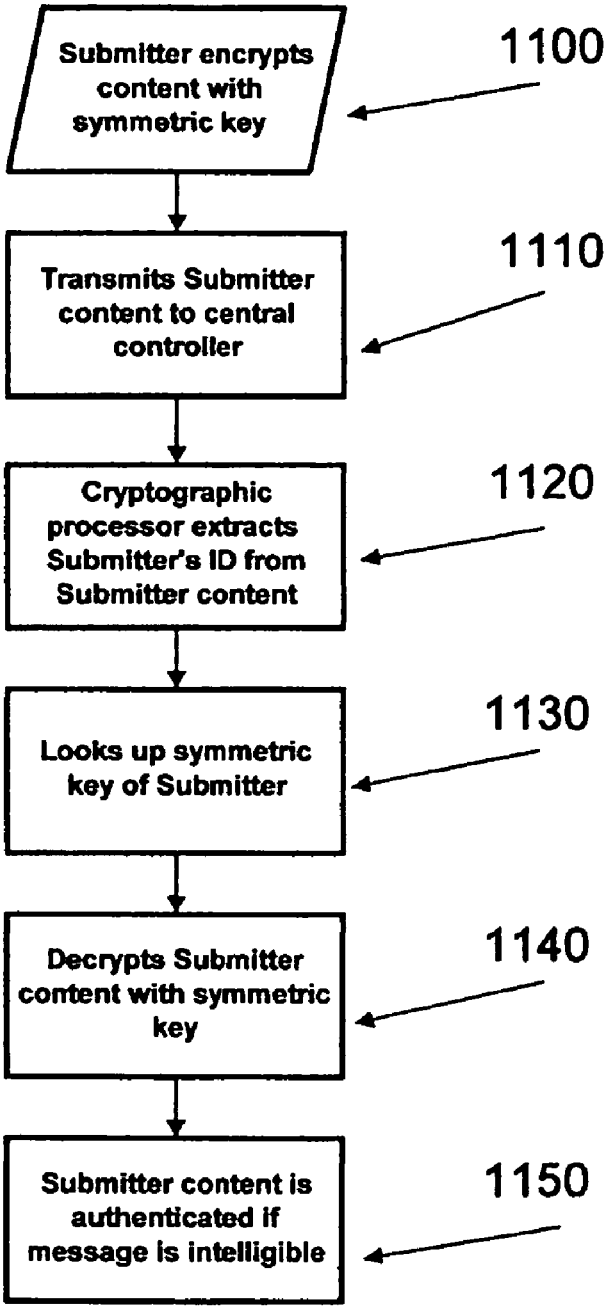
Submitter encrypts content with symmetric key
1100
Transmits Submitter content to central controller
1110
Cryptographic processor extracts Submitter's ID from Submitter content
1120
Looks up symmetric key of Submitter
1130
Decrypts Submitter content with symmetric key
1140
Submitter content is authenticated if message is intelligible
1150

FIG. 11

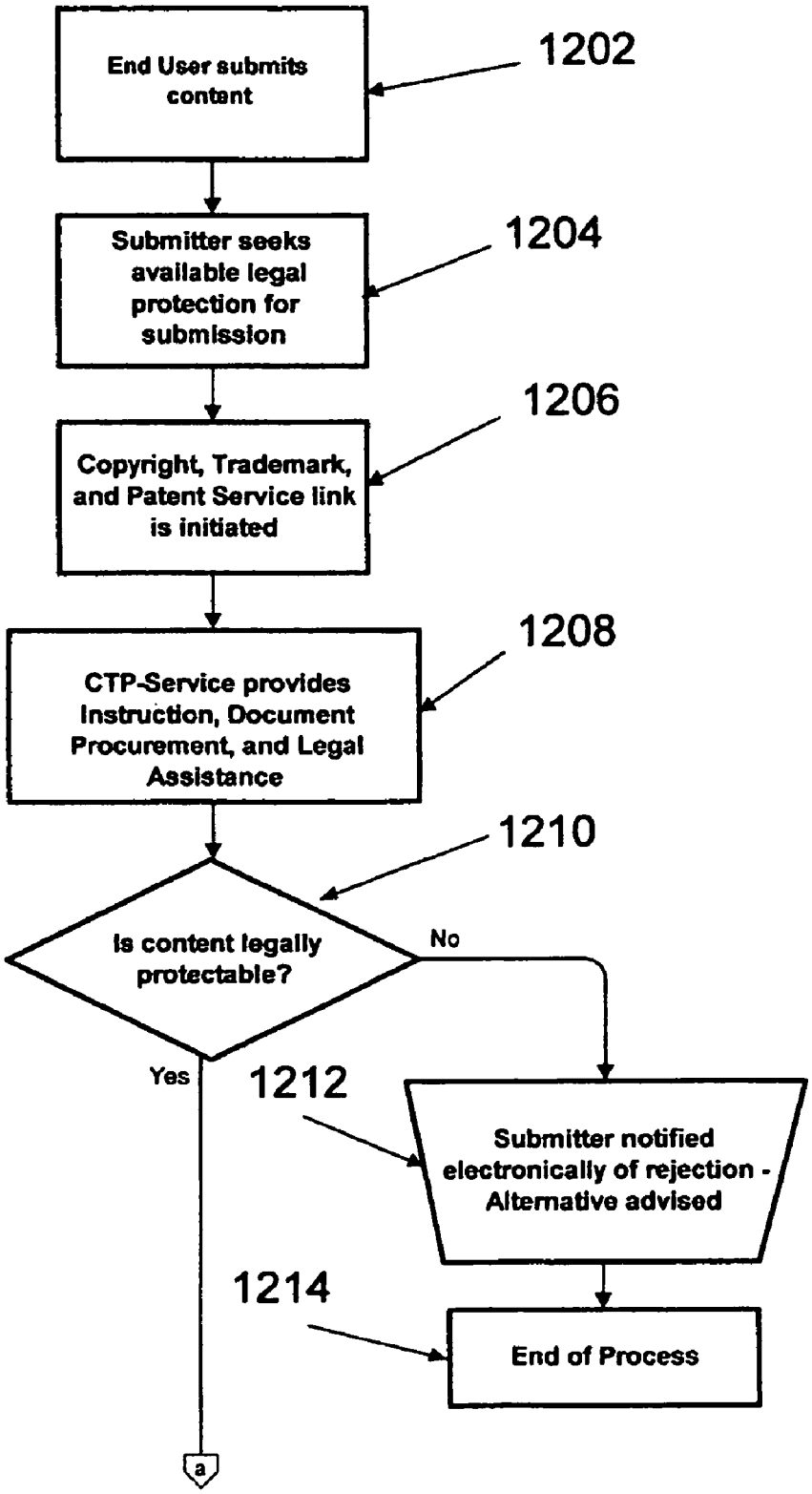
End User submits content
1202
Submitter seeks available legal protection for submission
1204
Copyright, Trademark, and Patent Service link is initiated
1206
CTP-Service provides Instruction, Document Procurement, and Legal Assistance
1208
Is content legally protectable?
1210
No
Yes
1212
Submitter notified electronically of rejection - Alternative advised
1214
End of Process
a

FIG. 12A

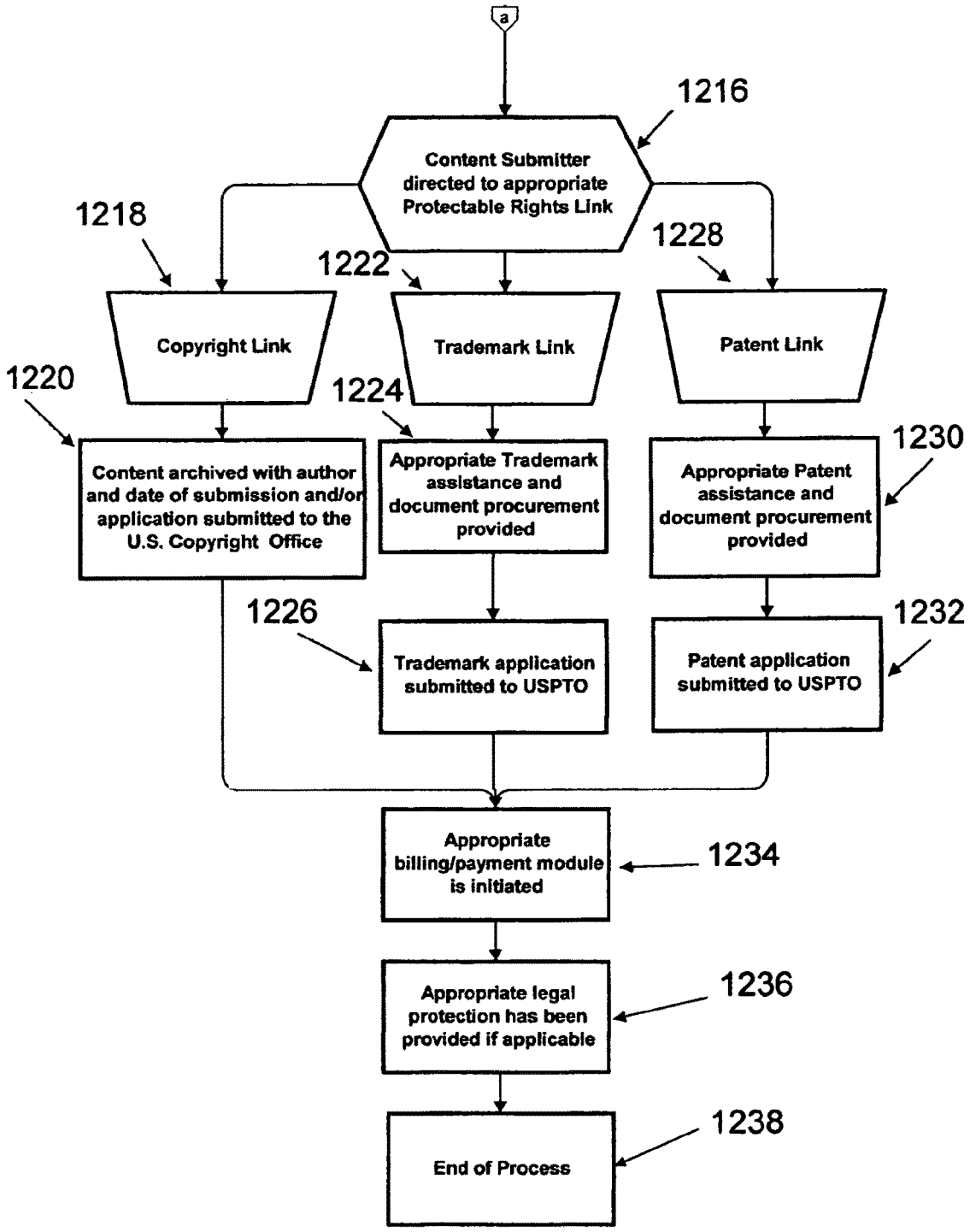
a
1216
Content Submitter directed to appropriate Protectable Rights Link
1218
1222
1228
Copyright Link
Trademark Link
Patent Link
1220
1224
1230
Content archived with author and date of submission and/or application submitted to the U.S. Copyright Office
Appropriate Trademark assistance and document procurement provided
Appropriate Patent assistance and document procurement provided
1226
1232
Trademark application submitted to USPTO
Patent application submitted to USPTO
Appropriate billing/payment module is initiated
1234
Appropriate legal protection has been provided if applicable
1236
End of Process
1238

FIG. 12B

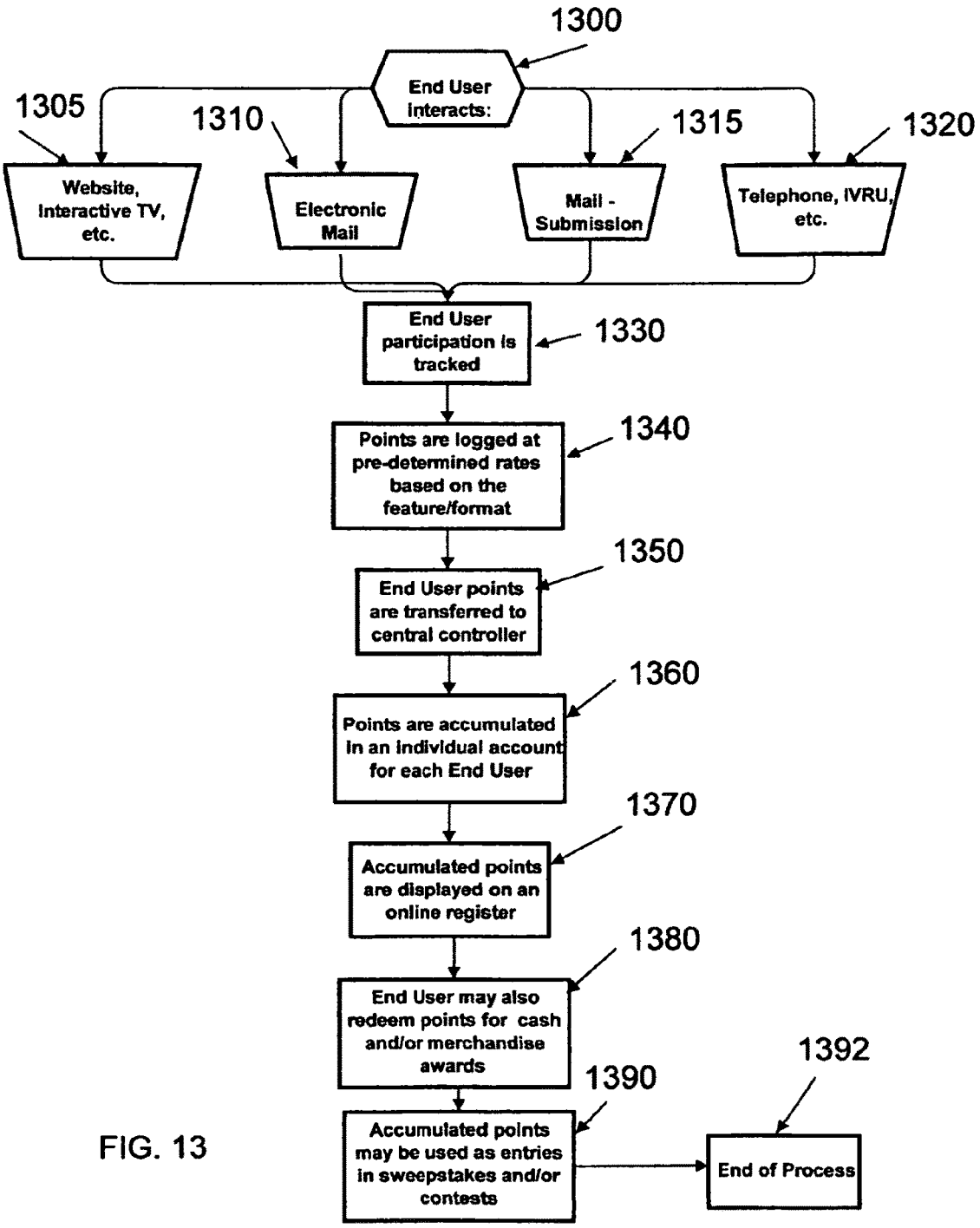
1300
End User interacts:
1305
1310
1315
1320
Website, Interactive TV, etc.
Electronic Mail
Mail - Submission
Telephone, IVRU, etc.
End User participation is tracked
1330
Points are logged at pre-determined rates based on the feature/format
1340
End User points are transferred to central controller
1350
Points are accumulated in an individual account for each End User
1360
Accumulated points are displayed on an online register
1370
End User may also redeem points for cash and/or merchandise awards
1380
Accumulated points may be used as entries in sweepstakes and/or contests
1390
End of Process
1392

FIG. 13

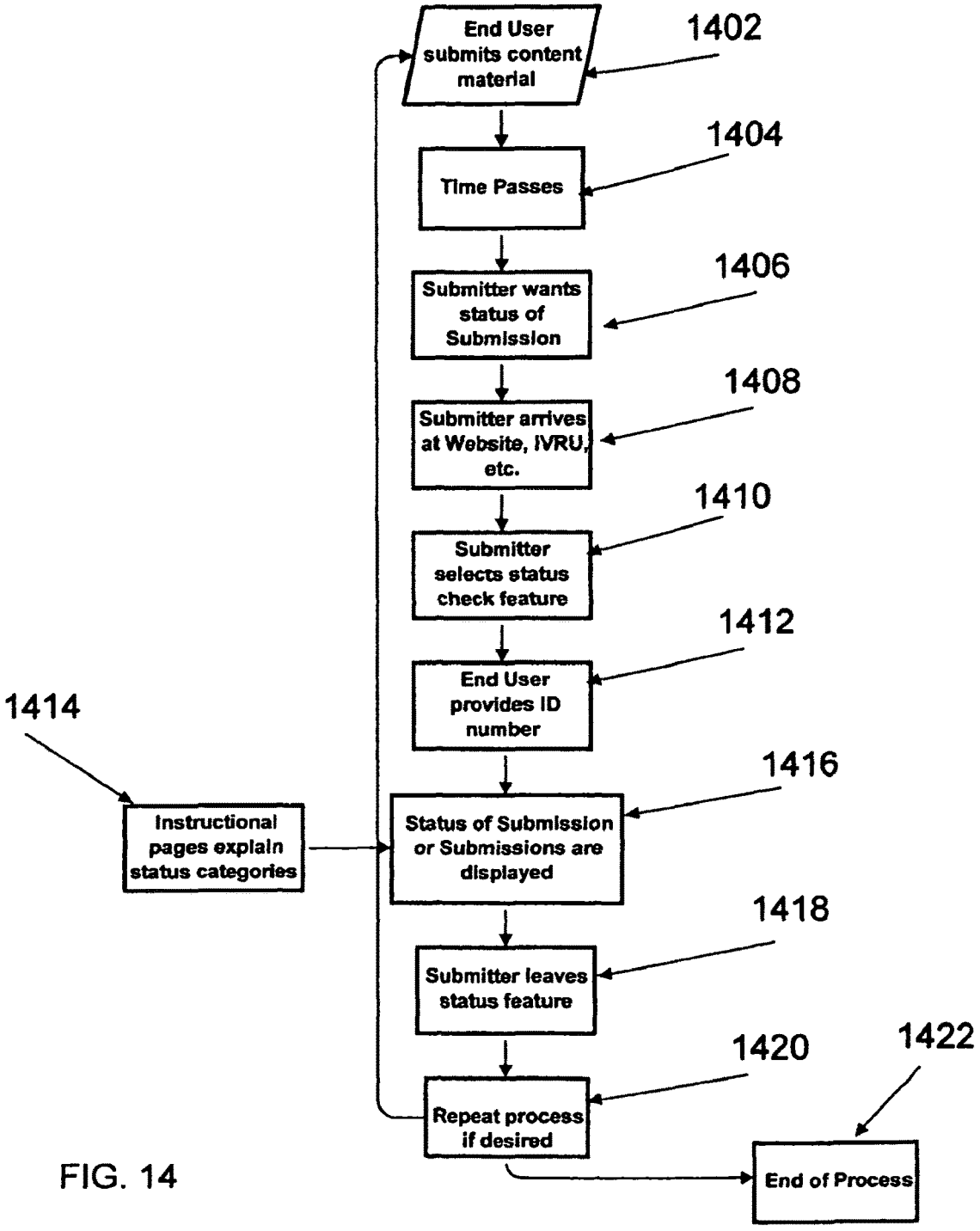
End User submits content material
1402
Time Passes
1404
Submitter wants status of Submission
1406
Submitter arrives at Website, IVRU, etc.
1408
Submitter selects status check feature
1410
End User provides ID number
1412
1414
Instructional pages explain status categories
Status of Submission or Submissions are displayed
1416
Submitter leaves status feature
1418
Repeat process if desired
1420
1422
End of Process

FIG. 14

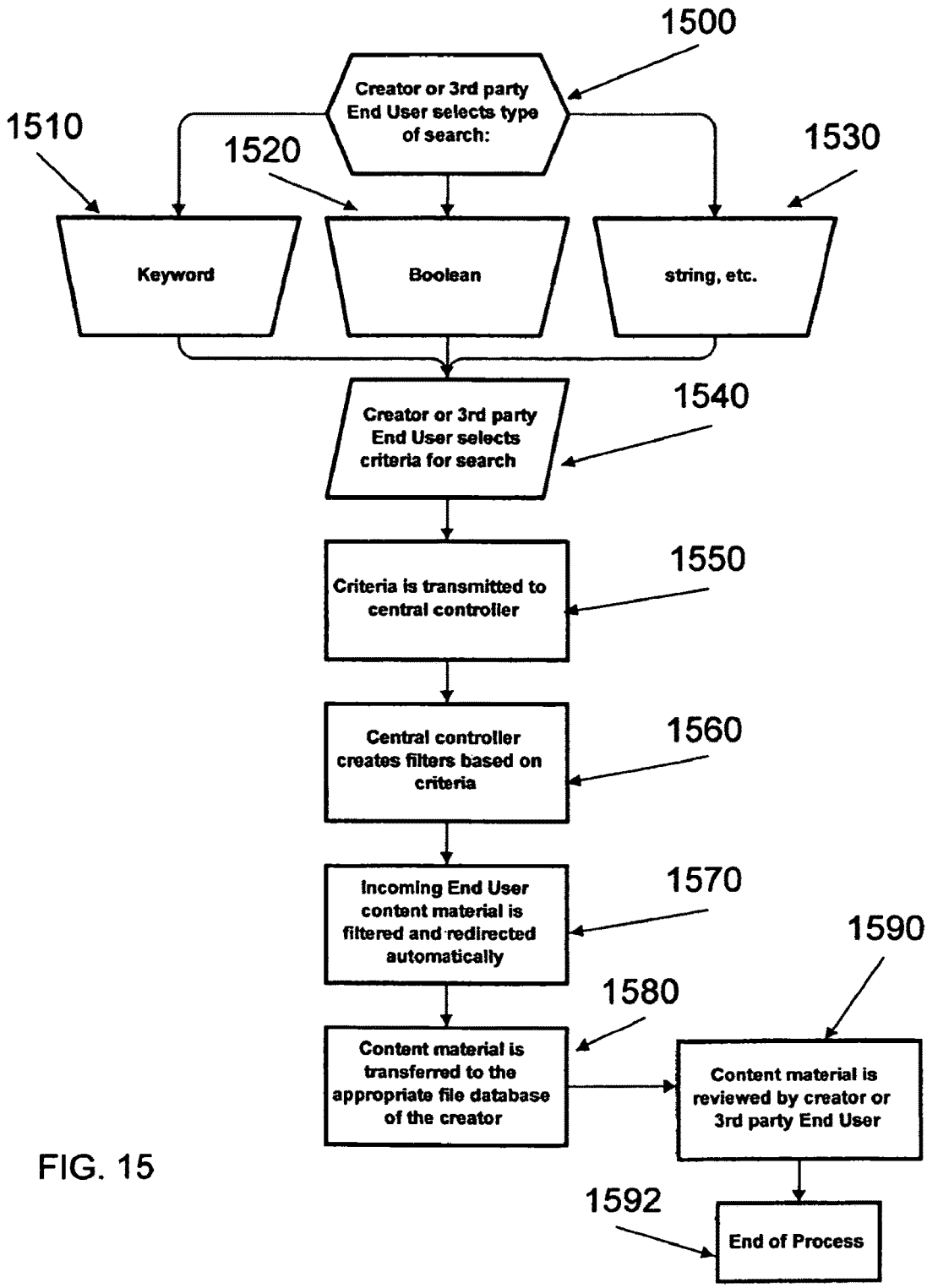
1500
Creator or 3rd party End User selects type of search:
1510
1520
1530
Keyword
Boolean
string, etc.
Creator or 3rd party End User selects criteria for search
1540
Criteria is transmitted to central controller
1550
Central controller creates filters based on criteria
1560
Incoming End User content material is filtered and redirected automatically
1570
1590
1580
Content material is transferred to the appropriate file database of the creator
Content material is reviewed by creator or 3rd party End User
1592
End of Process

FIG. 15

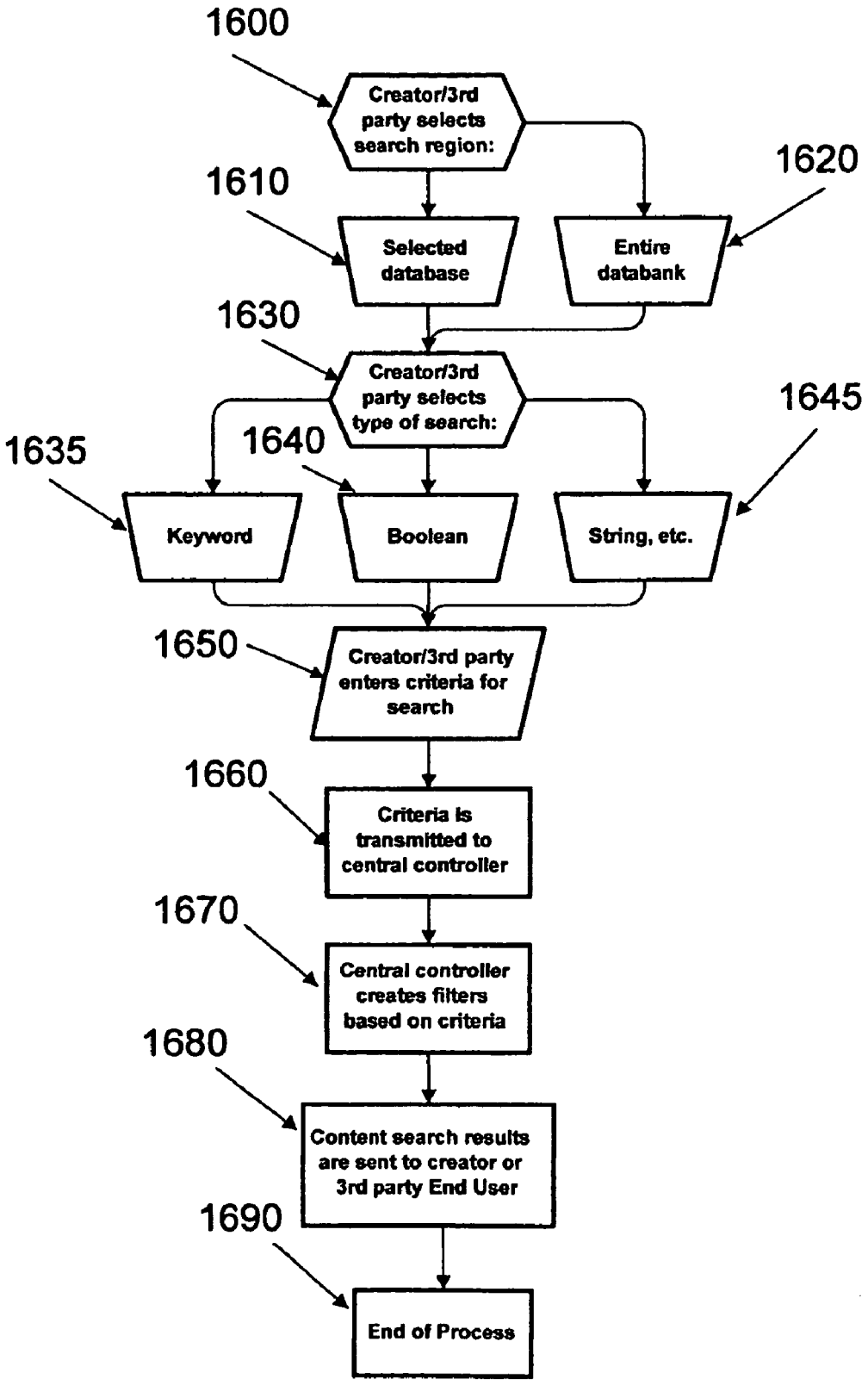
1600
Creator/3rd party selects search region:
1610
1620
Selected database
Entire databank
1630
Creator/3rd party selects type of search:
1645
1635
1640
Keyword
Boolean
String, etc.
1650
Creator/3rd party enters criteria for search
1660
Criteria is transmitted to central controller
1670
Central controller creates filters based on criteria
1680
Content search results are sent to creator or 3rd party End User
1690
End of Process

FIG. 16

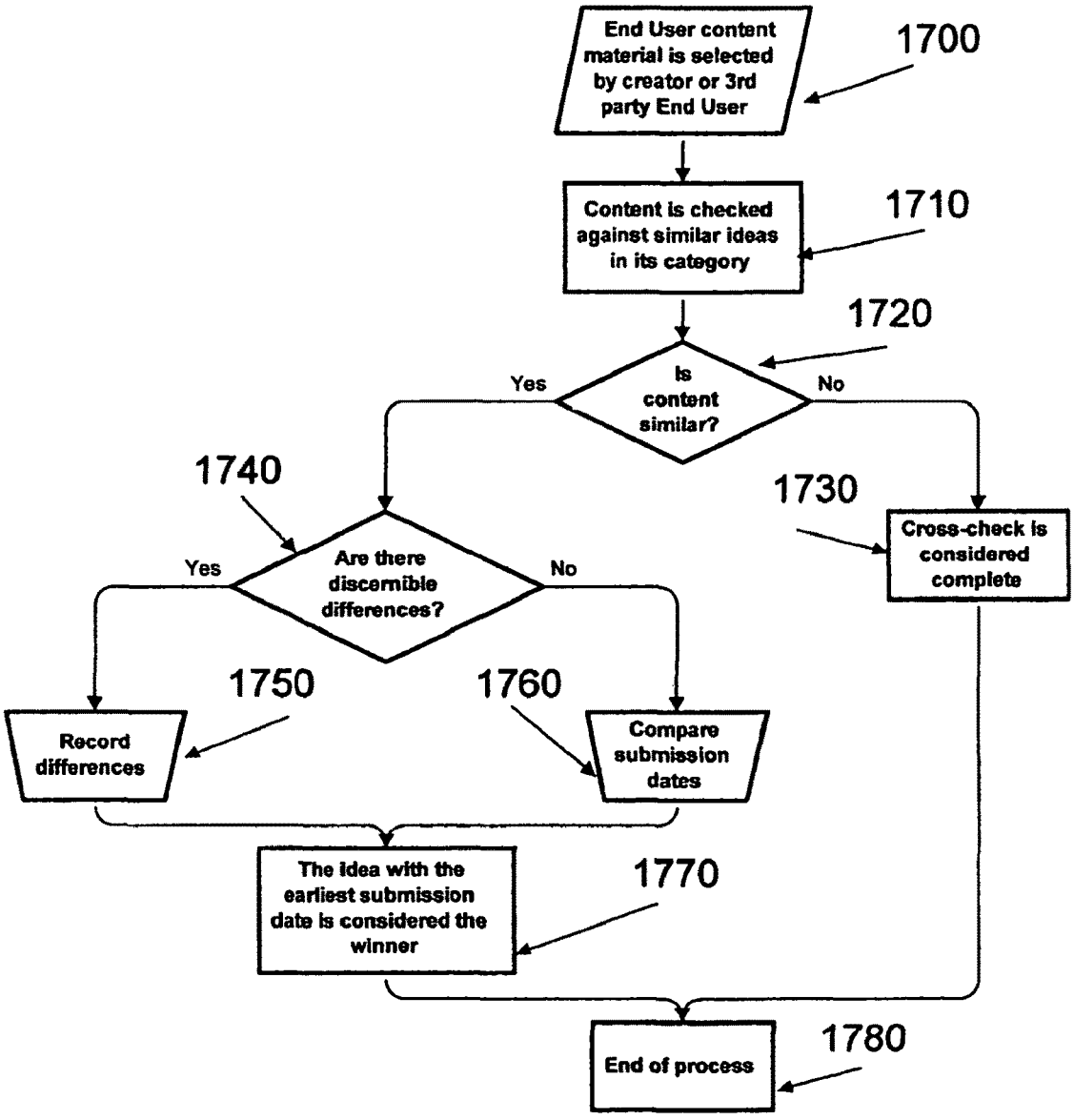
End User content material is selected by creator or 3rd party End User
1700
Content is checked against similar ideas in its category
1710
1720
Is content similar?
Yes
No
1740
Are there discernible differences?
Yes
No
1730
Cross-check is considered complete
1750
Record differences
1760
Compare submission dates
The idea with the earliest submission date is considered the winner
1770
End of process
1780

FIG. 17

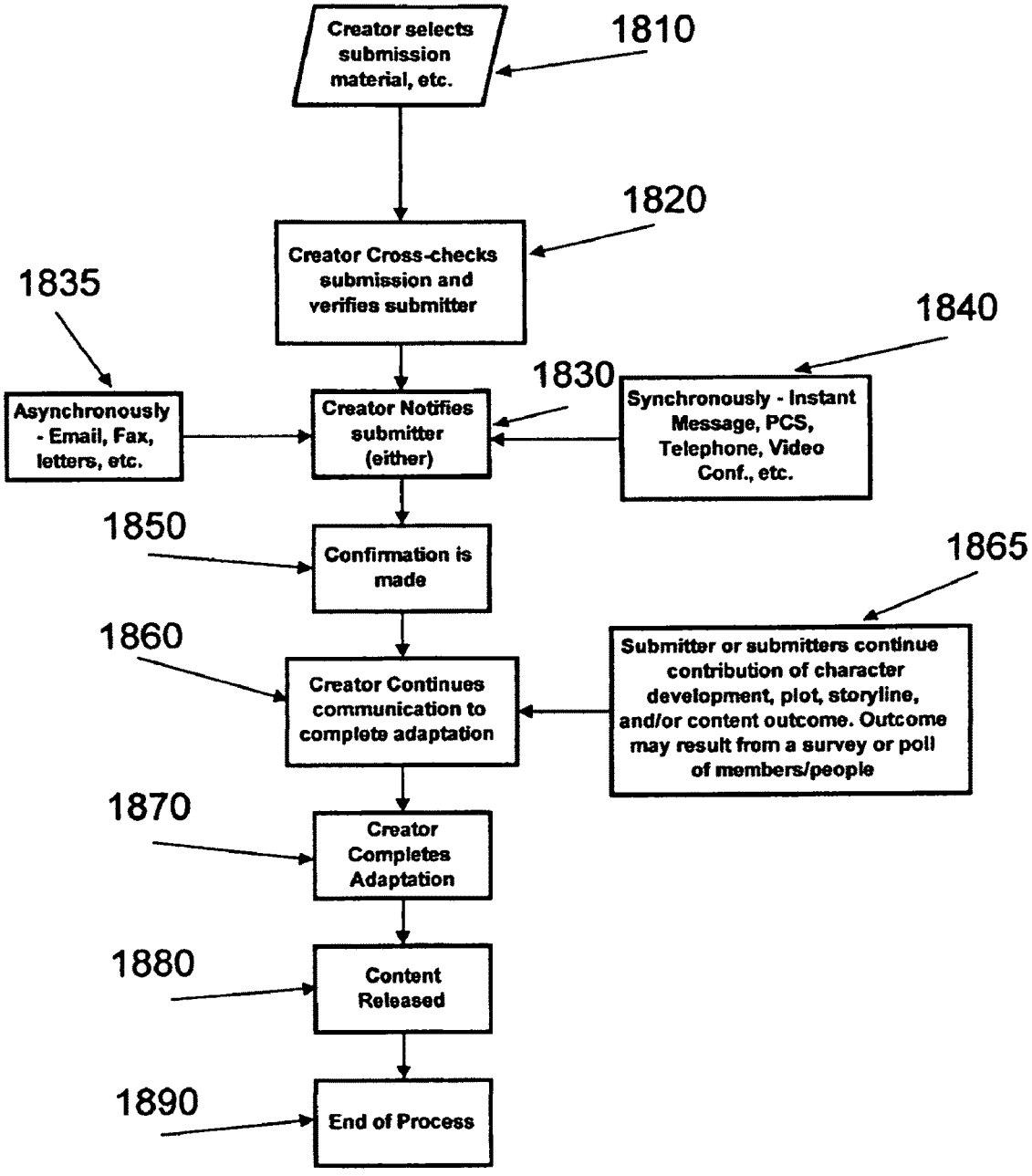
Creator selects submission material, etc.
1810
1820
Creator Cross-checks submission and verifies submitter
1835
1840
1830
Asynchronously - Email, Fax, letters, etc.
Creator Notifies submitter (either)
Synchronously - Instant Message, PCS, Telephone, Video Conf., etc.
1850
Confirmation is made
1865
1860
Creator Continues communication to complete adaptation
Submitter or submitters continue contribution of character development, plot, storyline, and/or content outcome. Outcome may result from a survey or poll of members/people
1870
Creator Completes Adaptation
1880
Content Released
1890
End of Process

FIG. 18

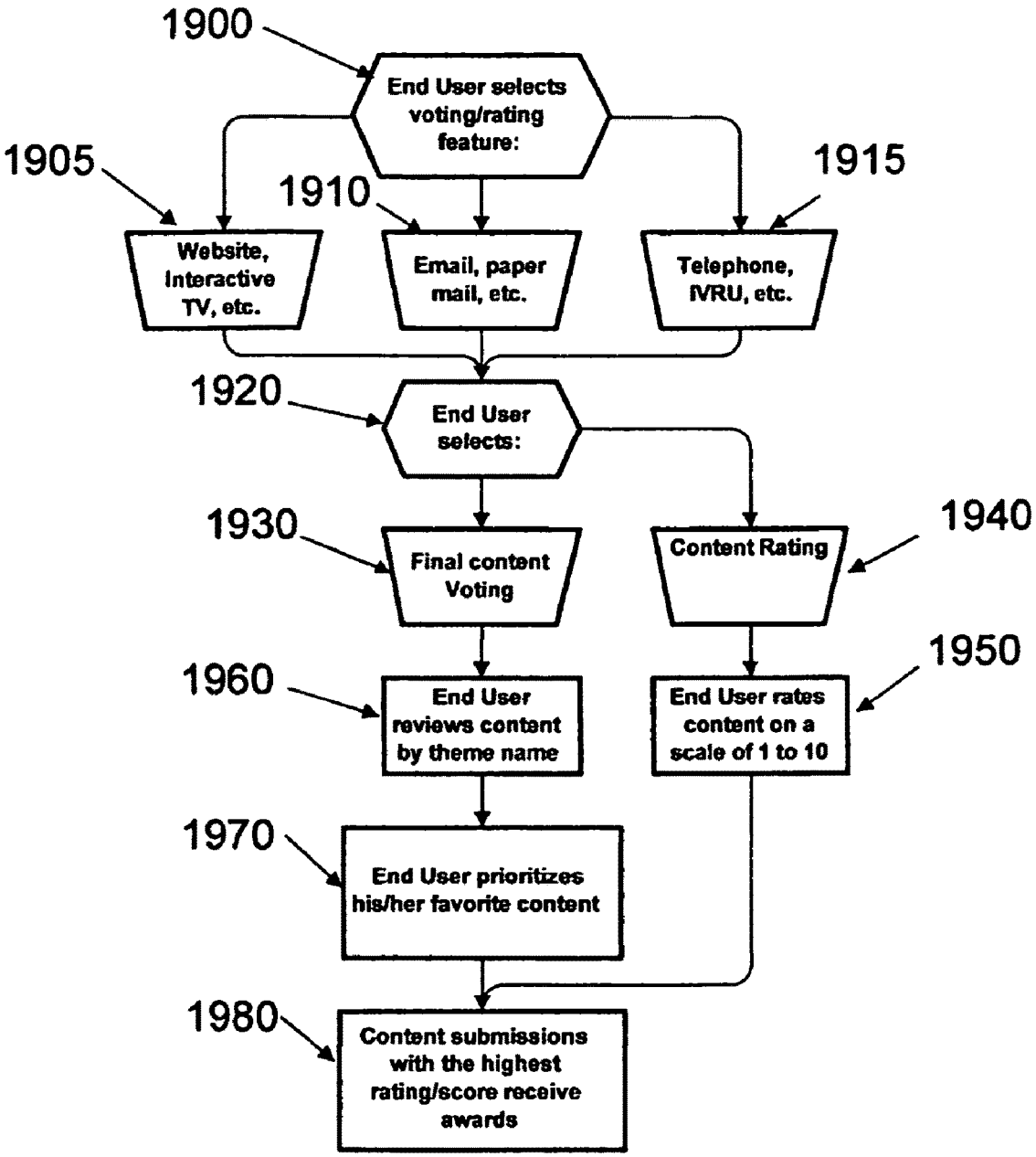
1900
End User selects voting/rating feature:
1905
1910
1915
Website, Interactive TV, etc.
Email, paper mail, etc.
Telephone, IVRU, etc.
1920
End User selects:
1930
Final content Voting
Content Rating
1940
1950
1960
End User reviews content by theme name
End User rates content on a scale of 1 to 10
1970
End User prioritizes his/her favorite content
1980
Content submissions with the highest rating/score receive awards

FIG. 19

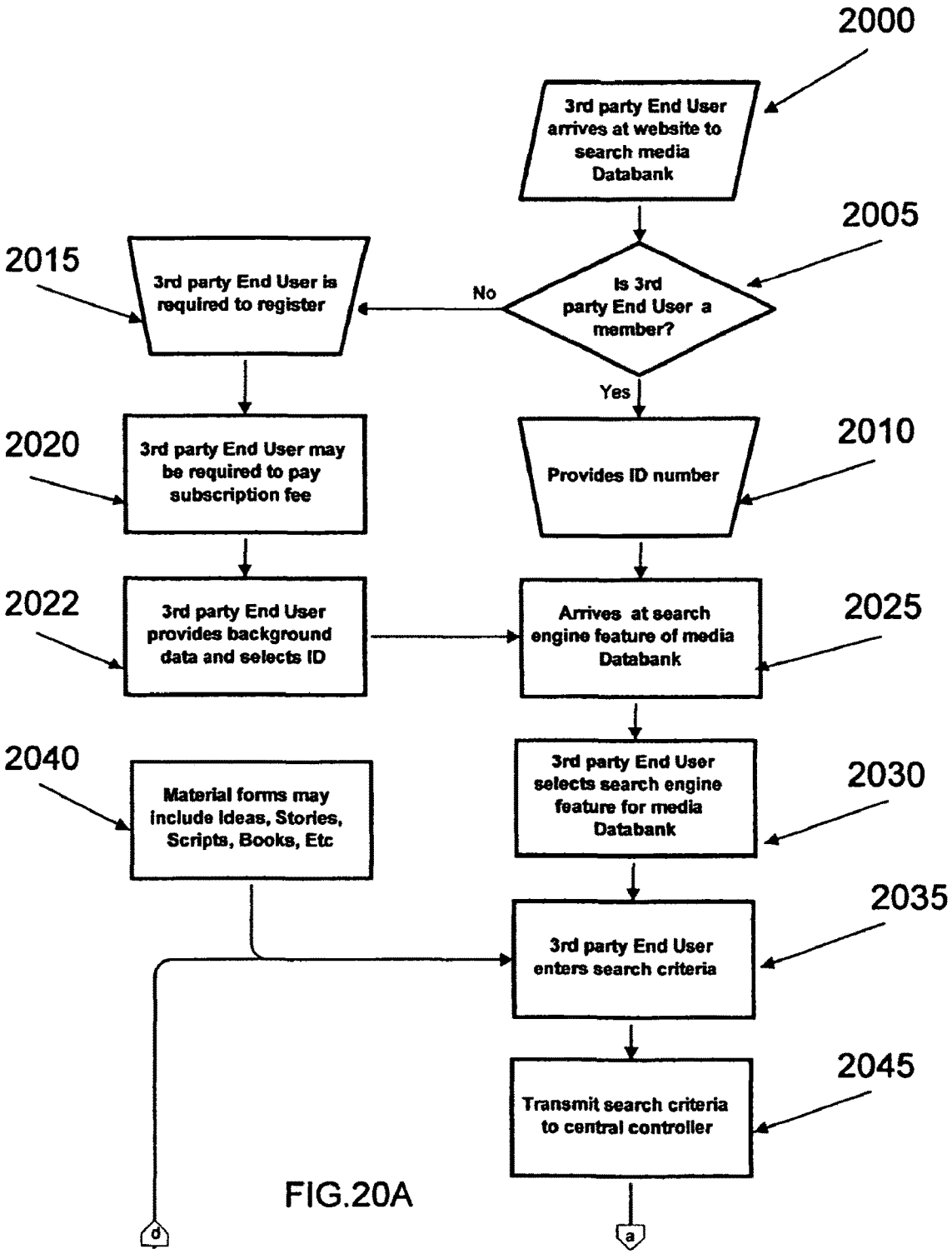
2000
3rd party End User arrives at website to search media Databank
2005
Is 3rd party End User a member?
No
2015
3rd party End User is required to register
Yes
2010
Provides ID number
2020
3rd party End User may be required to pay subscription fee
2022
3rd party End User provides background data and selects ID
2025
Arrives at search engine feature of media Databank
2030
3rd party End User selects search engine feature for media Databank
2040
Material forms may include Ideas, Stories, Scripts, Books, Etc
2035
3rd party End User enters search criteria
2045
Transmit search criteria to central controller
d
a

FIG.20A

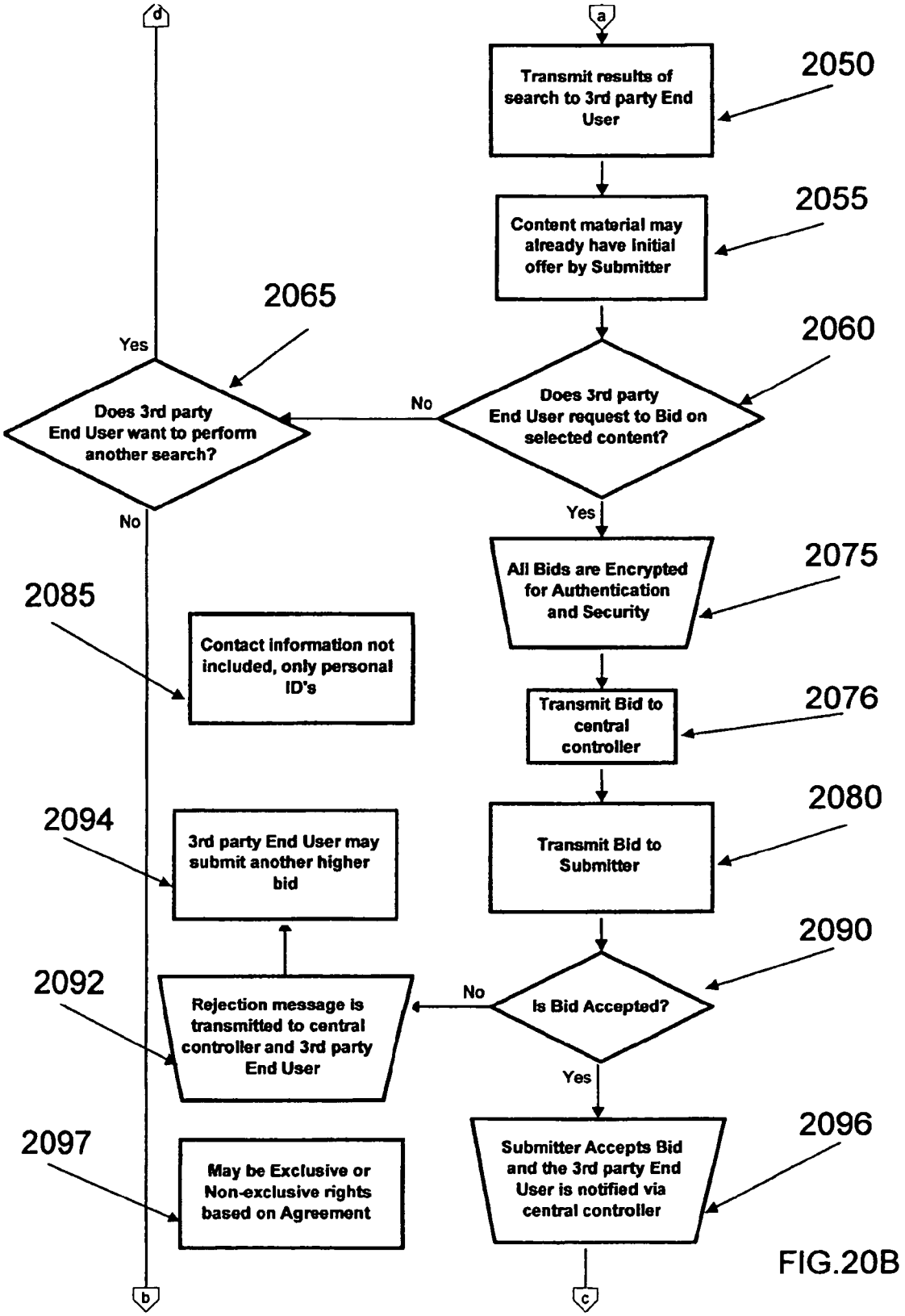
d
a
Transmit results of search to 3rd party End User
2050
Content material may already have initial offer by Submitter
2055
2065
2060
Yes
Does 3rd party End User want to perform another search?
No
Does 3rd party End User request to Bid on selected content?
Yes
No
All Bids are Encrypted for Authentication and Security
2075
2085
Contact information not included, only personal ID's
Transmit Bid to central controller
2076
2094
3rd party End User may submit another higher bid
Transmit Bid to Submitter
2080
2090
2092
Rejection message is transmitted to central controller and 3rd party End User
No
Is Bid Accepted?
Yes
2097
May be Exclusive or Non-exclusive rights based on Agreement
Submitter Accepts Bid and the 3rd party End User is notified via central controller
2096
b
c

FIG.20B

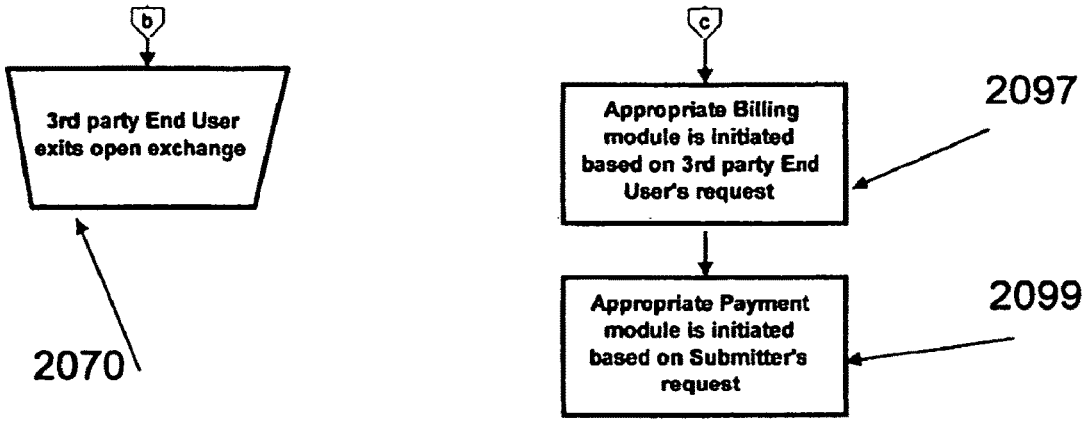
b
3rd party End User exits open exchange
2070
c
Appropriate Billing module is initiated based on 3rd party End User's request
2097
Appropriate Payment module is initiated based on Submitter's request
2099

FIG.20C

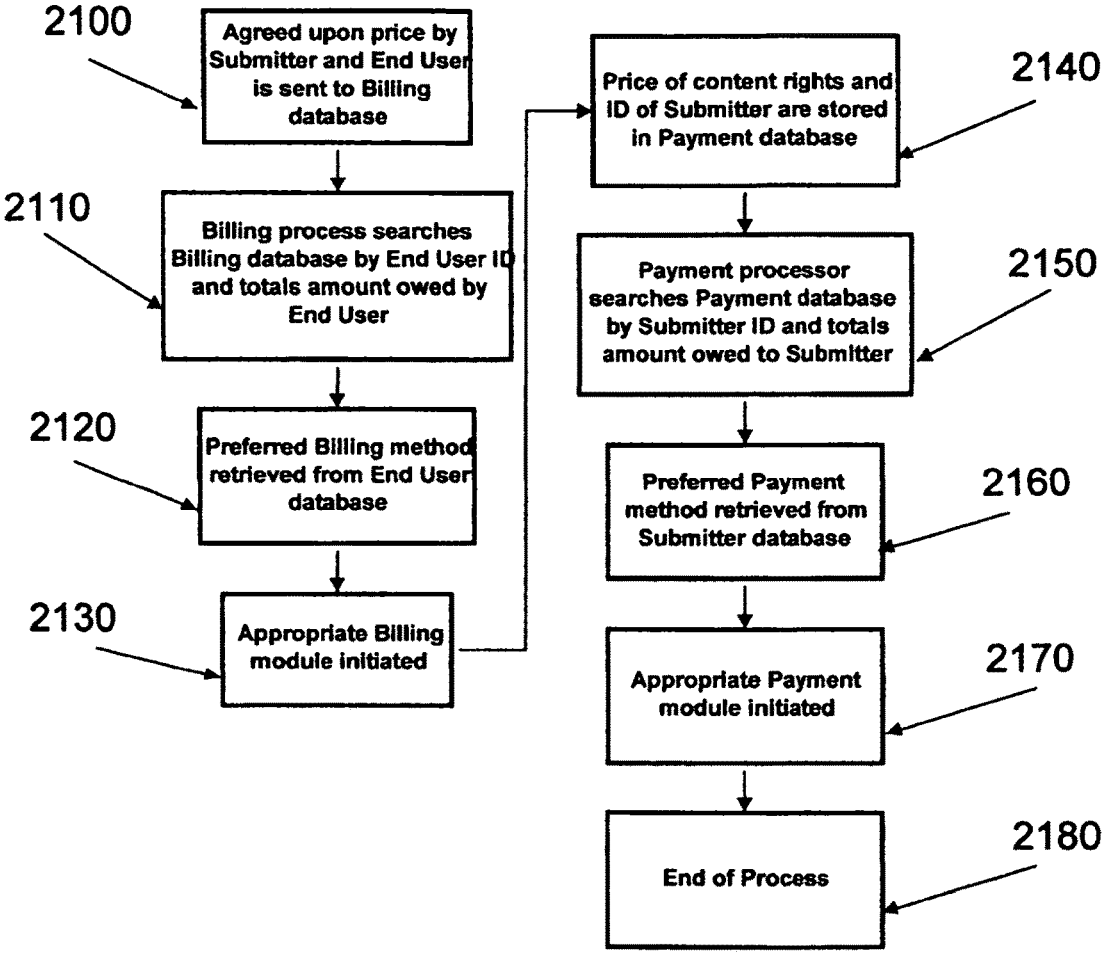
2100
Agreed upon price by Submitter and End User is sent to Billing database
2110
Billing process searches Billing database by End User ID and totals amount owed by End User
2120
Preferred Billing method retrieved from End User database
2130
Appropriate Billing module initiated
2140
Price of content rights and ID of Submitter are stored in Payment database
2150
Payment processor searches Payment database by Submitter ID and totals amount owed to Submitter
2160
Preferred Payment method retrieved from Submitter database
2170
Appropriate Payment module initiated
2180
End of Process

FIG. 21

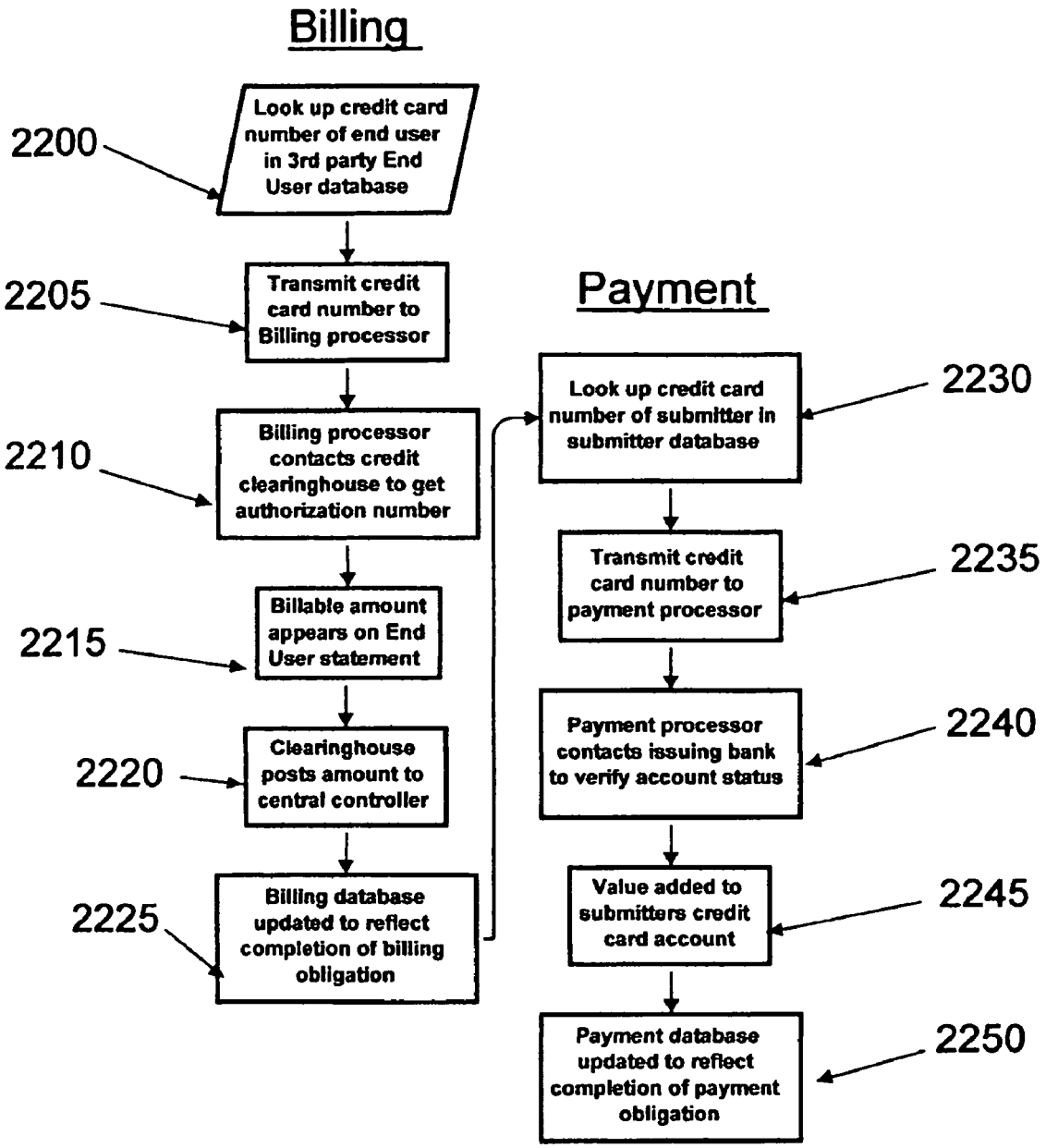
Billing
Look up credit card number of end user in 3rd party End User database
2200
Transmit credit card number to Billing processor
2205
Billing processor contacts credit clearinghouse to get authorization number
2210
Billable amount appears on End User statement
2215
Clearinghouse posts amount to central controller
2220
Billing database updated to reflect completion of billing obligation
2225
Payment
Look up credit card number of submitter in submitter database
2230
Transmit credit card number to payment processor
2235
Payment processor contacts issuing bank to verify account status
2240
Value added to submitters credit card account
2245
Payment database updated to reflect completion of payment obligation
2250

FIG. 22

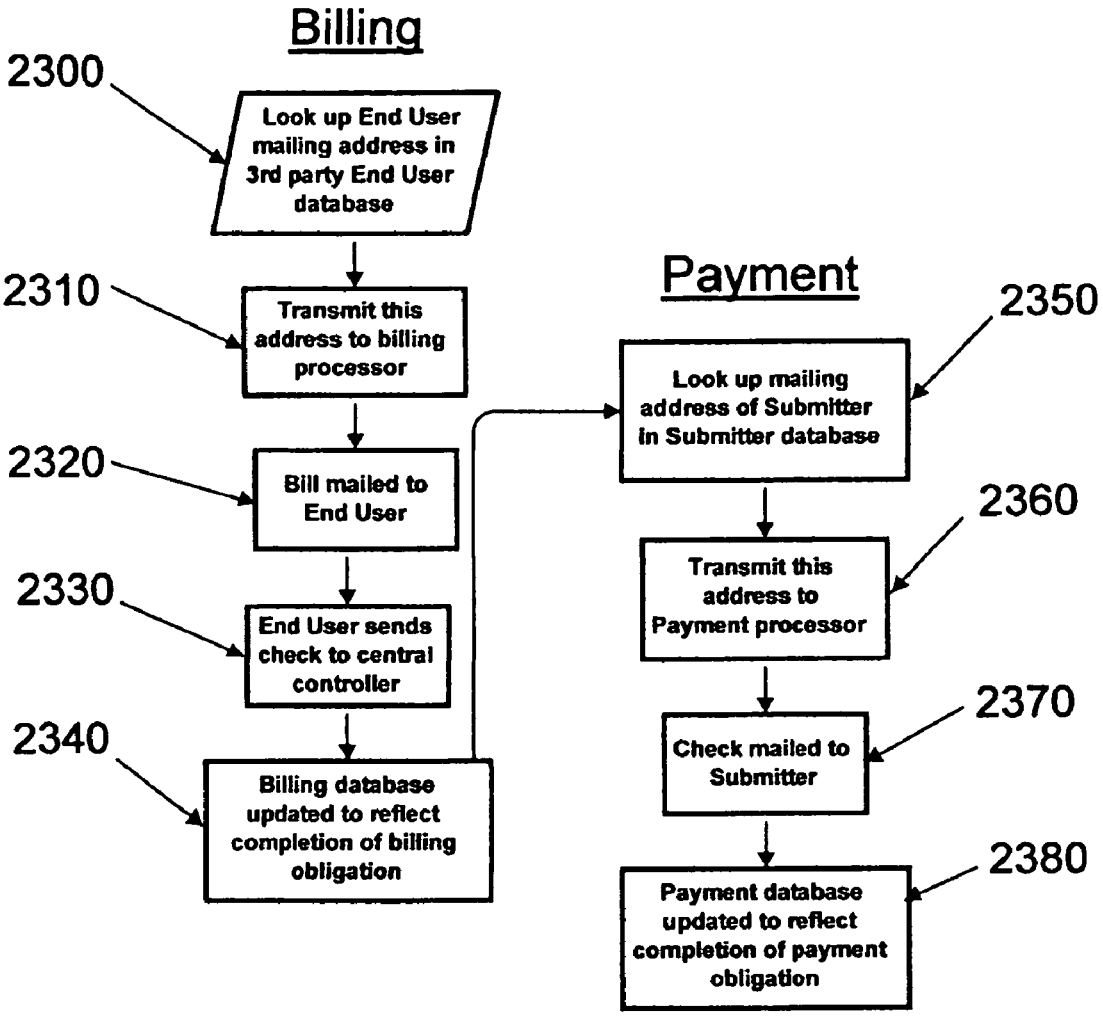
Billing
2300
Look up End User mailing address in 3rd party End User database
2310
Transmit this address to billing processor
2320
Bill mailed to End User
2330
End User sends check to central controller
2340
Billing database updated to reflect completion of billing obligation
Payment
2350
Look up mailing address of Submitter in Submitter database
2360
Transmit this address to Payment processor
2370
Check mailed to Submitter
2380
Payment database updated to reflect completion of payment obligation

FIG. 23

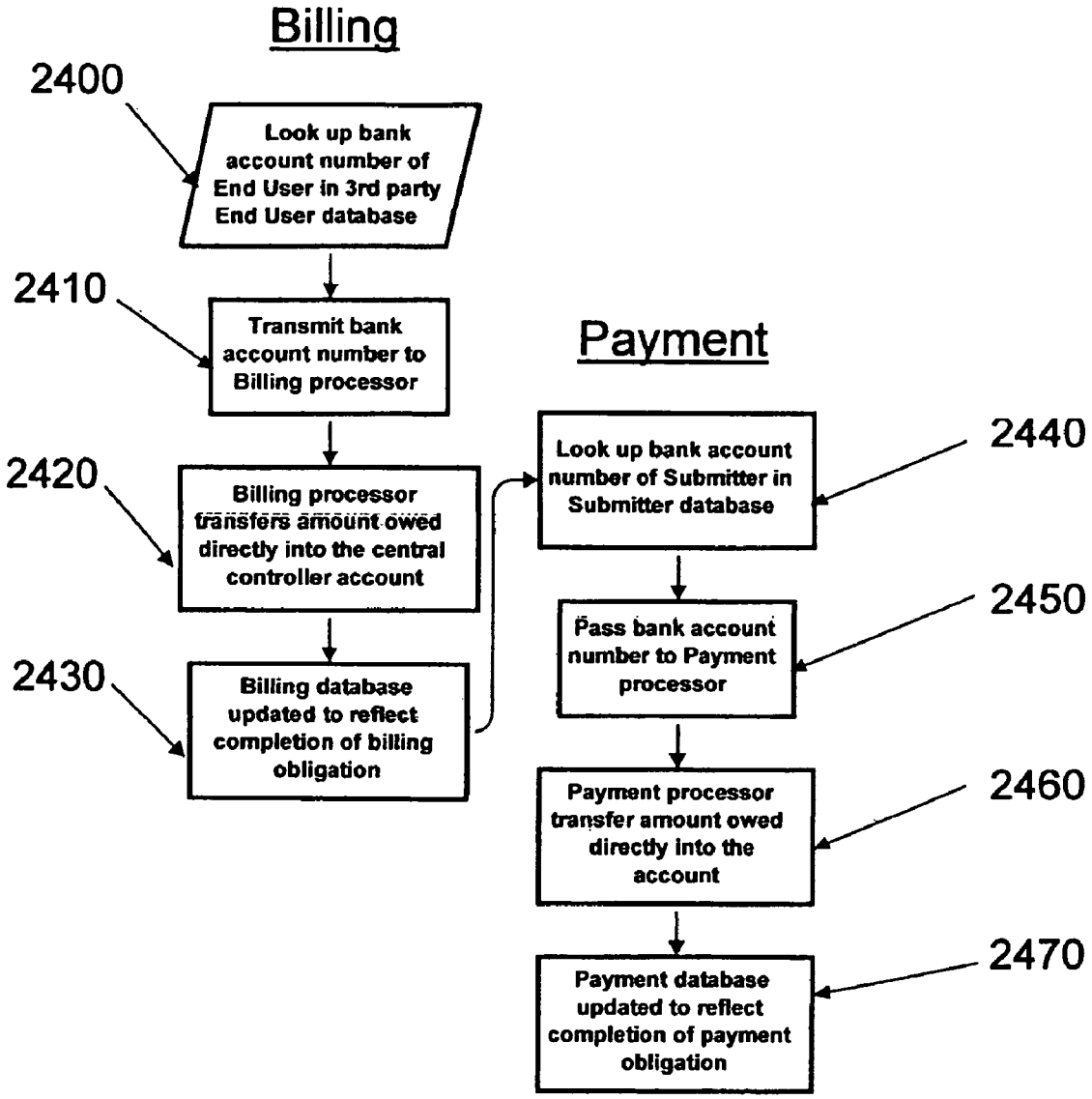
Billing
2400
Look up bank account number of End User in 3rd party End User database
2410
Transmit bank account number to Billing processor
2420
Billing processor transfers amount owed directly into the central controller account
2430
Billing database updated to reflect completion of billing obligation
Payment
Look up bank account number of Submitter in Submitter database
2440
Pass bank account number to Payment processor
2450
Payment processor transfer amount owed directly into the account
2460
Payment database updated to reflect completion of payment obligation
2470

FIG. 24

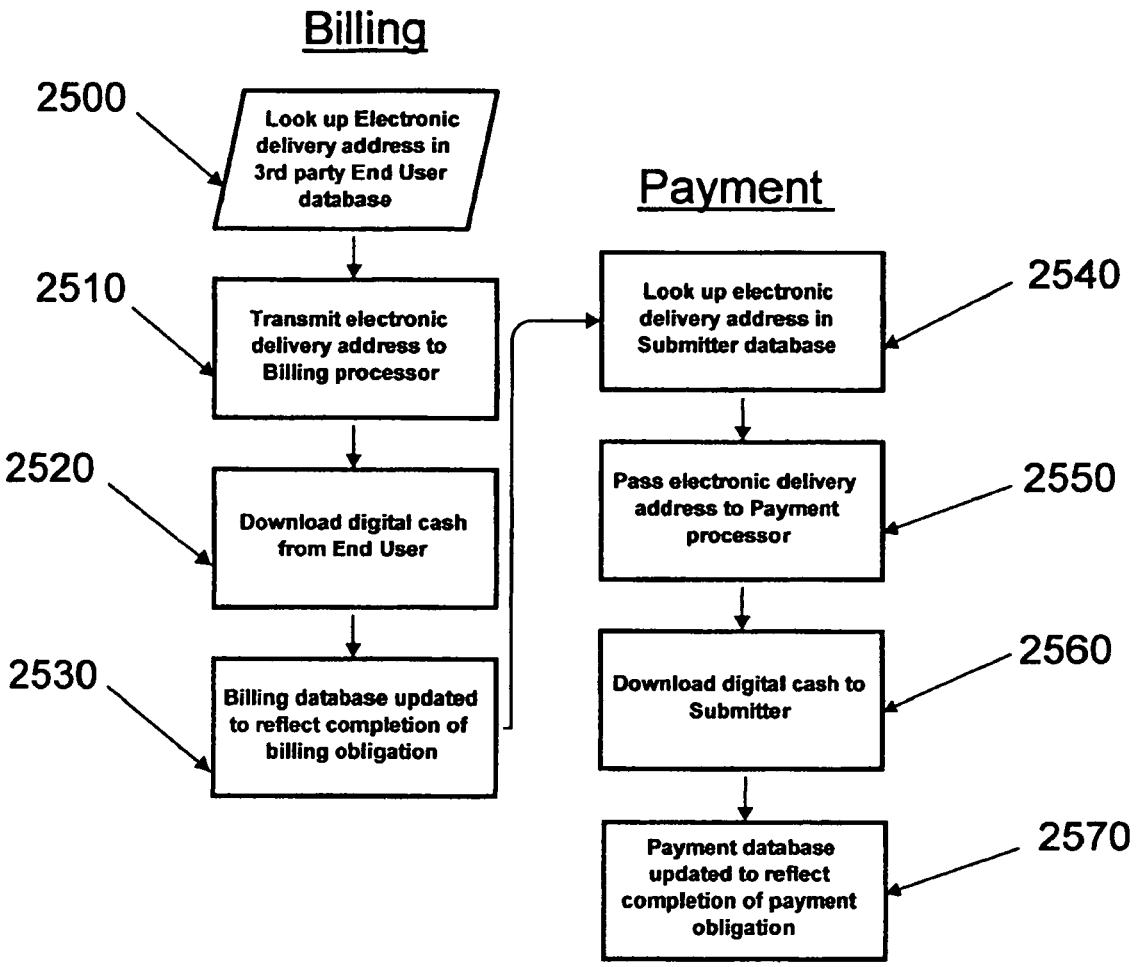
Billing
2500
Look up Electronic delivery address in 3rd party End User database
2510
Transmit electronic delivery address to Billing processor
2520
Download digital cash from End User
2530
Billing database updated to reflect completion of billing obligation
Payment
Look up electronic delivery address in Submitter database
2540
Pass electronic delivery address to Payment processor
2550
Download digital cash to Submitter
2560
Payment database updated to reflect completion of payment obligation
2570

FIG. 25

REVENUE-GENERATING ELECTRONIC MULTI-MEDIA EXCHANGE AND PROCESS OF OPERATING SAME

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of prior application Ser. No. 13/679,659, filed on Nov. 16, 2012, which is a continuation of prior application Ser. No. 11/978,781, filed on Oct. 30, 2007, now U.S. Pat. No. 8,340,994, which is a continuation of prior application Ser. No. 09/565,438, filed on May 5, 2000, now U.S. Pat. No. 7,308,413, and further claims priority from provisional application Ser. No. 60/133,247, filed May 5, 1999, the entire contents and disclosures of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

The present invention relates to the creation and distribution of media content such as television programming, movies, music and the like. More particularly, the present invention relates to a process for creating media content based upon submissions received on an electronic multi-media exchange.

The ever important influence of the Internet is evident from the following reports and statistics. According to a recent report, the number of Internet users in North America is approximately 92 million and it is estimated that 350 million people will be on the Internet by the year 2003. The growth of the Internet has been largely understated when considering that in June of 1993 there were a mere 130 web sites compared to more than 650,000 sites by the end of 1997, according to Jupiter Communications, a New York Media Research firm. In March of 1999, Network Solutions, having a U.S. franchise to dispense web addresses, registered its four millionth Internet domain name.

The Internet has reached farther and faster than any previous communications technology. It took 35 years for radio to reach 50 million listeners. Television needed 13 years to reach that number. In comparison, it took the Internet only 4 years to reach 50 million people (Cisco System Annual Report, 1998).

The Internet has fundamentally changed the way we communicate. It is estimated that 85% of the United States homes connected to the Internet use e-mail frequently, according to International Data Corporation (USA Today, Jun. 16, 19998). Individuals worldwide are taking classes, shopping for gifts, writing to their grandchildren, planning vacations, and buying everything from cars to homes using the Internet. According to Activmedia, e-commerce generated nearly one hundred billion dollars in revenue in 1999. It is estimated that electronic commerce (e-commerce) is expected to surge to more than one trillion dollars by the year 2003. According to an April, 1999 study by CommerceNet and Nielsen Media Research, the number of online consumers jumped 40% to 28 million over a nine month period.

According to a Navidec survey, 53% of Internet consumers in the United States made an on-line purchase within the first half of 1999, spending an average of $206 per purchase. This compares to just 26% of United States web users that purchased online in 1997. Cars and car parts (18.2 million shoppers), books (12.6 million shoppers), computers (12.4 million shoppers), clothing (11.6 million shoppers), and CD's/videos (11.4 million shoppers) top the list of items shopped for online.

It has been found that the incredible growth of the Internet is directly vying with television for limited household leisure time. A study conducted by the new Nielsen Media Research states that homes that have the Internet and on-line services are watching 15% less television than other homes (USA Today, Aug. 13, 1998). Television networks are increasingly having to face the future and prepare for the convergence of television and the Internet. This has recently been manifested by NBC's purchase of a major share of C-NET and ABC's purchase of a major share of the Internet search engine Infoseek.

The television industry finds itself having to grapple with its ability to attract viewers as technology offers unlimited avenues of entertainment. Furthermore, concerns for quality and new innovative approaches to programming have dampened the creative integrity of the medium. While consumers have a vast litany of channels to choose from, most of the programming is either recycled or lacks the creative freshness to stimulate consumer appeal. For example, the majority of prime time television shows have between eight to twelve writers based on budget or design. On average, each writer typically produces four to six quality ideas for their respective television show. For instance, today writers start with a pen and blank sheet of paper and it is incumbent upon them to generate a number of episodes from a single mind's creative ingenuity, inferences and real life experiences. Within this limited pool of ideas, it becomes a difficult challenge to produce twenty-four episodes per season with the same level of production quality.

Creating fresh ideas for weekly episodes is and has always been the writing team's biggest challenge, even if the show has a strong cast and original concept. Thus, a great number of television shows lack the creative frame of reference to produce consistent quality weekly episodes. Therefore, a growing number of television shows fail each year because they lack both a fresh concept and the creative frame of reference to produce consistent quality weekly episodes. Other media such as the movie, magazine, newspaper, and music industries all face similar challenges.

There are many people who have created books, screenplays, comic strips, songs, etc. and probably even more people who have thought of an idea for such media whose ideas are not currently being used. These individuals would like to expose their ideas to the appropriate media industry. Presently, this is done by directly contacting a media company in the industry and then mailing the media content to the company and waiting to hear if the company likes the idea and would like to use or purchase it. This requires an enormous amount of time and energy on behalf of the artist in making contacts and sending the materials to the right contacts. It also is a logistical nightmare for the media companies who are bombarded with scripts, songs and other artistic submissions which must then be sorted through before determining which, if any, of the submissions meet their needs.

There currently exist open exchanges for many items such as futures, stocks and bonds. Other exchanges specialize in the sale of information, such as that provided by Lexis/Nexis. The exchange's main function is to support a marketplace for the buying and selling of the goods and services. The exchange's main role is to serve as a structured meeting ground for the negotiation of the good or service provided. Currently, there does not exist a means of bringing artistic media works together in an open exchange format for searching, viewing and/or purchase in one convenient location.

Accordingly, there is a need for a process which facilitates the convergence of the technologies of media, such as television, and the Internet. What is also needed is a process which will allow media end users to interact with the creators of the media to grant a means of providing the media creator with creative submissions from the end users which can be selected and adapted for inclusion in the media content. The process should preferably reward the end user for his or her submission and participation with the process so as to create interest and enthusiasm in the media content. What is further needed is an open exchange wherein submitted media works and ideas can be conveniently searched for and viewed for use or purchase by third parties. The present invention fulfills these needs and provides other related advantages.

SUMMARY OF THE INVENTION

The present invention resides in a process for creating media content based upon submissions received on an electronic multi-media exchange.

In a preferred embodiment, the present invention includes a system of end user interfaces (for either members/submitters, creators, or third party end users), and a central controller having associated databases. The present invention provides a networked system to submit forms of either protectable or non-protectable content material which may be transformed in the same form or adapted into multi-media content for distribution. In particular, any form of content material that may be stored in file text, video, audio, etc. and transferred through the network system described herein. Such content material applicable to the present invention may include, but is not limited to the following: movies, screenplays, television scripts, book manuscripts, plays, music, music lyrics, newspaper and magazine articles, comic stripes, sweepstakes, print media like calendars, greeting cards, novelty items, digital photographs, etc. as well as any other form of literary work or idea that might be non-protectable or protectable through either copyright, trademark, or patent rights.

Submitters receive credits for their contributions and can receive awards and compensation through submission awards campaigns or through an open exchange. The networked system supervises the request and distribution of submissions to creators, provides a search mechanism for content material selection, stimulates an end user interest through contest and points awards campaigns, and can allow third party access to request and/or purchase submissions through the open exchange. Thus, a person looking to submit content material can do so in a simple, cost and time effective manner and may be compensated for their participation.

It is also the intention of the present invention to provide an e-commerce model where content distributed over television or the Internet will provide a gateway to purchasing products and services displayed or audibly presented during the content presentation. The e-commerce embodiment will enable viewer purchases to occur either on the creator's web site through recreated models or right off the screen of television or Internet presentations through the use of clickable video and a mouse or remote. This is enabled through digital technology which might entail set-top box technology for the conversion of analog television broadcast to a digital format. A masking technique overlays the video production to both identify and display those items available for promotion and/or purchase.

The process of the invention generally comprises the steps of first requesting media submissions for inclusion in the media content. End users interface with a creator serviced system utilizing a computer network. Submissions are electronically received from the end users. One or more electronic submission formats are typically provided to the end user. For example, the submission format can be an interactive format which includes at least one of pre-prepared, fill-in-the-blanks, questions and answers, polls, surveys and games. Alternatively, the submission format is an open format wherein the end user submits original media material such as scripts, music etc. The submission material, which can comprise anything which can be stored in an electronic file or digitally transferred, is stored in a computer database.

The end user, now the submitter, is granted a predetermined number of points for the submission. The points can be redeemed for entry into a sweepstakes or for the purchase of prizes. The end user can elect to purchase products presented within released content with the points. These products can also be offered for cash or credit card sale.

The end user can be offered intellectual property protection information so that the end user can protect his or her submission material, or have the services offered through the creator service provider or directed to an appropriate provider of such services.

The submissions are searched for submission material which is intended to be included in the media content. The desired submission material is cross-checked against the other submissions for originality and timeliness before selecting the submission. The end user is then notified that his or her submission has been selected. All end users can check the status of their submissions to see if their submission has been reviewed and/or by the creator.

After the material is selected from the one or more submissions, the content is developed based, in whole or part, upon the selected one or more submissions. This can occur by communicating with the end user and working with the end user to adapt his or her submission material for use in the media content.

After the content has been developed, it is released to an audience which includes end users for review. The end user's whose submission material was included in the released content are rewarded.

Preferably, end users of the audience rate the released content. Those end users who submitted material in the open format were entered into a contest. A reward may be given to one or more end users based upon a high rating of the released content which included the user's material.

In a particular preferred embodiment, the submissions can be made available to an open exchange. Third parties are permitted to access and search the submissions on the open exchange as determined by the creator service provider. The third parties can bid for rights in particular submissions on the open exchange. After receiving these bids, they are forwarded by the creator service provider to the particular submission's end user. The invention can provide agency and sales services which promote the submitter's material. A billing system can be provided for use by the third parties and end users of the open exchange for transacting payment and billing. The billing system can also be used by the creator service provider in billing either third parties or end users for services rendered or in paying end users for their selected submissions.

Other features and advantages of the present invention will become apparent from the following more detailed

description, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate the invention. In such drawings:

FIG. **1** is a block diagram showing a creator central controller electronically connected to various end user viewer interfaces via a network;

FIG. **2** is a block diagram of an embodiment of the central controller of FIG. **1**, utilized in accordance with the present invention;

FIG. **3** is a block diagram illustrating computing resources of the central controller of FIG. **1** being distributed over a number of servers;

FIG. **4** is a block diagram showing an exemplary end user system interface;

FIGS. **5**A-**5**D are flowcharts illustrating general steps of the process of the present invention;

FIGS. **6**A and **6**B are flowcharts illustrating registration steps taken in accordance with the present invention;

FIG. **7** is a flowchart illustrating the steps taken in asynchronous content request from the creator central controller;

FIGS. **8**A and **8**B are flowcharts illustrating the steps of interactive, synchronous content request;

FIG. **9** is a flowchart illustrating the steps taken in interactive content submission in accordance with the present invention;

FIGS. **10**A and **10**B are flowcharts illustrating the steps taken in open content submission in accordance with the present invention;

FIG. **11** is a flowchart illustrating the steps of encryption of electronic transfers in accordance with the present invention;

FIGS. **12**A and **12**B are flowcharts illustrating steps taken in provision of intellectual property protection services;

FIG. **13** is a flowchart illustrating the steps taken for a point system in accordance with the present invention;

FIG. **14** is a flowchart illustrating the steps taken in conducting a status check in accordance with the present invention;

FIG. **15** is a flowchart illustrating the steps taken in a pre-selected search process in accordance with the present invention;

FIG. **16** is a flowchart illustrating the steps taken in an open search process in accordance with the present invention;

FIG. **17** is a flowchart illustrating the steps taken in cross-checking submissions in accordance with the present invention;

FIG. **18** is a flowchart illustrating the steps taken in communicating with selected submitters;

FIG. **19** is a flowchart illustrating the steps taken in a voting process in accordance with the present invention;

FIGS. **20**A-**20**C are flowcharts illustrating the steps taken in an open exchange in accordance with the present invention;

FIG. **21** is a flowchart illustrating a method of billing and payment used in accordance with the present invention;

FIG. **22** is a flowchart illustrating the steps taken in conducting paper billing and payment;

FIG. **23** is a flowchart illustrating the steps taken in conducting credit card billing and payment;

FIG. **24** is a flowchart illustrating the steps taken in conducting electronic fund transfer billing and payment; and

FIG. **25** is a flowchart illustrating the steps taken in conducting digital cash billing and payment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The terms content or interactive content are used in the following description to broadly apply to any form of deliverable content or media that may be either broadcast or distributed to entertain, instruct, or deliver some form of message. Although television and the Internet embody the preferred form of media of the present invention, the scope of the invention is applicable to all forms of media whether printed, broadcast, projected or performed. With the advent of the Internet and the building of the broadband communications network, content will be delivered through many different evolving multi-media technologies, all of which come under the object of this invention. For example, analog and digital television, the Internet, and satellite and broadband communications are some of the channels for delivering content as presented by this invention. Moreover, as television and the Internet become indivisible, the applications of the present invention will apply to the rapidly evolving interactive media of the new millennium.

The method and apparatus of the present invention will now be discussed.

Network System Architecture

The system architecture of a preferred embodiment of the apparatus and process of the present invention is illustrated in FIGS. **1**-**4**. As shown in FIG. **1**, the system architecture of the present invention generally comprises a central controller **200**, end user viewer interfaces **400** (collectively the "nodes"). Each node is typically connected to the central controller **200** via an Internet connection, such as a modem **110**, using a public switched phone network **120**, such as those provided by a local or regional telephone operating company. Connection may also be provided by dedicated data lines, cellular, personal communication systems ("PCS"), microwave, or satellite networks. Interfaces **400** are the input and output gateways for communications with central controller **200**.

Using the above components, the present invention provides a method and apparatus to request desired content material, receive content material submissions from registered members, search and cross-check desired material, stimulate participation through content awards and points campaigns, and allows third party access to request and/or purchase submissions through an open exchange embodiment, as further described herein. Through the method and apparatus of the present invention, creators and third party end users end users can efficiently request and/or search for desired content materials and submitters are compensated through numerous ways presented herein for such submissions.

As shown in FIG. **2**, central controller **200** includes central processor (CPU) **205**, cryptographic processor **210**, RAM **215**, ROM **220**, billing processor **225**, payment processor **230**, clock **235**, operating system **240**, network interface **245**, and data storage device **250**. A conventional personal computer or computer workstation with sufficient memory and processing capability may be used as central controller **200**. In a preferred embodiment the central controller **200** operates as a web server, both receiving and transmitting data inquiries generated by end users. The central controller **200** must be capable of high volume

transaction processing and performing a significant number of mathematical calculations in processing communications and database searches. A Pentium microprocessor, commonly manufactured by Intel Inc., may be used for CPU **205**.

A microcontroller, commonly manufactured by Motorola Inc., may be used for cryptographic processor **210**. Equivalent processors may also be used. Cryptographic processor **210** supports the authentication of communications from the creators, third parties and submitters/members as well as allowing for anonymous transactions. Cryptographic processor **210** may also be configured as part of CPU **205**. Other sample commercially available specialized cryptographic processors include VLSI Technology's 33 MHz 6868 or Semaphore Communications' 40 MHz Roadrunner 284.

Referring again to FIG. **2**, billing processor **225** and payment processor **230** comprise conventional microprocessors (such as the Intel Pentium), supporting the transfer and exchange of payments, charges, or debits, attendant to the method of the apparatus. Either processor **225** or **230** may also be configured as part of CPU **205**. Processing of credit card transactions by these processors may be supported with commercially available software, such as the Secure Webserver manufactured by Open Market, Inc. This server software transmits credit card numbers electronically over the Internet to servers located at the Open Market headquarters where card verification and processing is handled. Their Integrated Commerce Service provides back-office services necessary to run Web-based businesses. Services include online account statements, order-taking and credit card payment authorization, credit card settlement, automated sales tax calculations, digital receipt generation, account-based purchase tracking, and payment aggregation for low-priced services.

Data storage device **250** may include hard disk magnetic or optical storage units, as well as CD-ROM drives, flash memory or other nascent memory devices with future commercial application. Data storage device **250** may contain this representative storage configuration for processing the necessary transactions for the present invention, including submitter/member database **255**, creator/third party database **260**, submission databases 1, 2, 3, etc. **265**, request databases 1, 2, 3, etc. **270**, content databases 1, 2, 3, etc. **275**, subject database **280**, billing database **285**, payment database **290**, points database **295**, voting/survey database **300**, audit database **305**, and cryptographic key database **310**. More than one database per function may be needed to facilitate the expensive nature of the application, i.e. submission databases 1, 2, 3, etc. depending on the many different types of submissions received. It is important to note, the configuration presented is representative in nature and the actual configuration will depend on the specific application of the present invention. In a preferred embodiment database software such as Oracle7, manufactured by Oracle Corporation, is used to create and manage these databases.

Member/submitter database **255** maintains data on all the registered members and more specifically those who have made submissions, such as name, address, private key information, e-mail addresses, physical addresses, payment preferences, voice mail addresses, member profile, biographies, past submissions, respective subject areas of submissions and the like. Member profile includes, instructional page acceptance, disclaimer acceptance, prior submission bids accepted, submission rights sale rates, automatic bid amounts, acceptable price ranges, and the like. Member/submitter database **255** may include rating information generated by end users, as well as member address, which is used to direct communications to the member. Member address comprises a phone number, web page URL, bulletin board address, pager number, telephone number, e-mail address, voice mail address, facsimile number, or any other way to contact the member either synchronously (such as telephone or chat-room) or asynchronously (such as e-mail or postal mail). Member/submitter database **255** also stores all bid responses and bid counter offers generated by the submitter. Advertising data generated by the member/submitter may also be stored in this database. Depending on the application of the present invention and the specific storage preferences for members and/or submitters, this database configuration may require a separate database structure for members and submitters.

Creator/third party database **260** maintains data on all creators or third party end users, such as name, address, phone number, ID number, e-mail address, payment preferences, past system usage, private key information, etc. It also contains creator/third party end user profiles, which stores preferences, membership acceptance, disclaimer acceptance, acceptable price levels, bid amounts, and the like. It also contains copies of each bid offer and bid counter offer generated by the third party end user, as will be explained further herein. Depending on the application of the present invention and the specific storage preferences for creators and third party end user, this database configuration may require a separate database structure for creators and third party end users.

Submission databases 1, 2, 3, etc. **265**, may include more than one database depending on the different forms of submissions, includes content material submissions received by central controller **200** and indexed by subject. A unique tracking number is also stored for each submission. The submission database **265** also stores the submitter's name(s), as well as the time and date of the submission. Submissions may be transferred through mediums such as, but not limited to e-mail, postal mail, telephone, fax, voice mail, IVRU (Interactive Voice Response Unit), voice recognition technology (such as SpeakEZ), beeper, web page URL, electronically transferred text, pictures, audio, video, etc. and through other communication transfer devices either digital, like PDA's, as well as non-digital.

Request database **270** includes all creator or third party end user content material request received by central controller **200** and indexed by subject. A unique tracking number is also stored for each request. The request database **270** also stores the requester's name(s), as well as the time and date of the request.

Content databases 1, 2, 3, etc. **275**, may include more than one database depending on the different forms of content archived, includes both content material kept in form and content material adapted into multi-media that is received by the central controller **200**, indexed by subject and distributed. The content is then given a unique tracking number, and the content and its title are stored, along with the time and date of its release.

Subject database **280**, maintains all of the categorical data either provided by submitters or requested by creators or third party end users for the submission or request for content material. This database can also be used to store submissions which are being developed into content by the creator.

Billing database **285** and payment database **290** track all commercial transactions, as well as payment and billing preferences. These databases are valuable in the event of

complaints by both submitters and third party end users regarding payment, because an audit trail can be produced.

Points database **295** maintains an up to date point total displayed in real time on the Internet or other electronic communications device of a member's point accumulations for their interactive participation. The points may be used to enter sweepstakes, or purchase cash and other merchandise awards and the like.

Voting/survey database **300** maintains the voting register of members/peoples voting and rating of distributed content. This database may also be used to perform other survey functions for either content rating or interactive feature content submissions.

Audit database **305** stores transactional information that may be retrieved for later analysis. Due to the legal liability of submitting either protectable or non-protectable content material, a electronic paper tail is necessary for storing and tracking both submission and request file utilization by anyone connected to the network, approved or unapproved. Text data from chat rooms may also be stored in this database, for audit by creators and/or third party end users.

In order to facilitate cryptographic functions, there is cryptographic key database **310** which stores both symmetric and asymmetric keys. These keys are used by cryptographic processor **210** for encrypting and decrypting all content material submissions and creator or third party end user request, as well as message traffic such as bid amounts and acceptances of offers. It should be understood that the above described databases are representative only. Databases may be added or substituted as necessary in order to accomplish the intended processes of the present invention.

Network interface **245** is the gateway to communicate with members/submitters and creators and/or third party end users through their respective interfaces. Conventional internal or external modems may serve as network interface **245**. Network interface **245** supports modems at a range of baud rates from 1200 upward, but may combine inputs into such as a T1 and T3 (or OC1, OC2, and OC3) line if more bandwidth is required. In a preferred embodiment, network interface **245** is connected with the Internet and/or any of the commercial online service providers such as America Online, CompuServe, The Microsoft Network, or NetZero allowing end users access from a wide range of online connections. Several commercial e-mail servers also include the above functionality. NCD Software manufactures "Post.Office", a secure server-based electronic mail software package designed to link people and information over enterprise networks and the Internet. The product is platform independent and utilizes open standards based on Internet protocols. Users can exchange messages with enclosures such as files, graphics, video and audio. The system also supports multiple languages. Alternatively, network interface **245** may be configured as a voice mail interface web site, BBS, or e-mail address.

While the above embodiment describes a single computer acting as the central controller, those skilled in the art will realize that the functionality can be distributed over a plurality of computers. In another embodiment, central controller **200** may be configured in a distribution architecture, as shown in FIG. **3**, wherein the databases and processors are housed in separate units or locations. Controllers **320** through **340** perform the primary processing functions and contain at a minimum RAM, ROM, and a general processor. Each of these controllers is attached to WAN hub **300** which serves as the primary communication link with the other devices. WAN hub **300** may have minimal processing capability itself, serving primarily as a communications router. Although only three controllers are shown in this embodiment, those skilled in the art will appreciate that an almost unlimited number of controllers may be supported. In such a configuration, each controller is in communication with its constituent parts, but the processor and/or data storage functions are performed by stand-alone units. Payment processor and database **350** and **355**, billing processor and database **360** and **365**, and end user database **370** all communicate through WAN hub **300** with controllers **320** through **340**. This arrangement yields a more dynamic and flexible system, less prone to catastrophic hardware failures affecting the entire system.

FIG. **4** describes the architecture of interfaces **400** for members/submitters, creators and/or third party end users. In an exemplary embodiment the interfaces comprise conventional personal computers having an input device, such as a keyboard, mouse, or conventional voice recognition software package; a display device, such as a video monitor; a processing device such as a CPU; and a network interface such as a modem. Alternatively, interface **400** may also comprise voice mail systems, or other electronic or voice communications systems. As will be described further, devices such as fax machines or pagers are also suitable interfaces.

The interface architecture **400** typically includes a central processor (CPU) **405**, RAM **410**, ROM **415**, clock **420**, video driver **425**, video monitor **430**, communication port **440**, input device **445**, modem **450**, and data storage device **460**. Cryptographic processor **435** and even biometric devices **455** may be added for stronger authentication as described later. A Pentium microprocessor such as the 100 MHz P54C described above may be used for CPU **405**. Clock **420** is a standard chip-based clock which can serve to time-stamp either submissions or requests produced with interface **400**. If a cryptographic processor is required, the MC68HC16 microcontroller described above can be used. The structure of a biometric device will be described below in conjunction with the cryptographic authentication embodiment. Data storage device **460** is a conventional magnetic based hard disk storage unit, such as those manufactured by Conner Peripherals. Information storage database **470** may be used for archiving purposes while audit database **480** may be used for recording communications with central controller **200** as well as payment records.

There are many commercial software applications that can enable the communications required by interface **400**, the primary functionality being message creation and transmission and electronic file transfer text, video, audio, etc. Eudora Pro manufactured by Qualcomm Incorporated, for example, provides editing tools for the creation of messages as well as the communications tools to route the message to the appropriate electronic address.

The Process of the Invention

While the preferred embodiment focuses on a television application for the present invention, this exemplary description may be representative of any medium that distributes content and/or media as described above. Additionally, the convergence of television and the Internet to form an interactive medium renders the present definition of television as too narrow in scope to adequately encompass the invention. As discussed herein, the word television will serve to represent all forms of analog or digitally transferred audio and video presentations, whether broadcast over cable, satellite, or the Internet. This includes all interactive formats broadcast over the Internet or traditional television through the use of set-top box technology, interactive television, or other digital devices.

It should be noted that the terms referenced for the participants of the present invention member, submitter, creator, and third party end user may be used to refer to one or many in the context of the application.

Referring now to FIGS. **5**A-**5**D, the process of the present invention is generally illustrated. Through the use of the system architecture discussed in FIGS. **1**-**4**, at step **500** creators or third party end users may request content material to develop content, either maintaining its form or adapting it to a desired media. Content material request will preferably be transmitted through interactive television or over the Internet through a web destination, e-mail, IM (Instant Message), chatroom, or other present synchronous or asynchronous Internet protocol or developing Internet communications as described below. Alternatively, material content requests may include but are not limited to paper mail, telephone, IVRU (Interactive Voice Response Unite), fax, beeper, etc.

In response to the content request in step **500**, end users interface with the system and register at step **502**. At step **504**, the end user selects a submission format. If the end user selects the interactive submission feature in step **506**, the end user responds to surveys, polls, fill-in-the-blanks, question and answers, games etc. prepared by the creator and/or third party end user and which are encrypted for authorization and security as illustrated in steps **508** and **510** and more fully described below with respect to FIG. **10**. The end user submitter receives a pre-determined number of points in step **512** for the submission which can be accumulated and traded to enter a sweepstakes or purchase other prize awards. The awards or sweepstakes can include items which are the subject of the medium content, for example a music CD, or a product shown on the subject television program.

In step **514**, the data containing the submission is transmitted to the central controller and stored and retained by the creator. The submission material may be made available to a third party open exchange in step **516** for use and/or purchase by third parties as more fully described herein with respect to FIG. **20**. As part of this process, in step **518** the submitter or creator may place an initial offer or beginning bid price on the content material. Although the submission material is password and otherwise encrypted, in step **520** the submitter may purchase protection insurance through the open exchange.

After receipt and storage, in step **522** the submission material is selected by the creator and adapted into content. The submitter may check the status of his or her submission at any time after submission in step **524** by inquiring the central controller **200** of its status. The central controller **200** tracks the submission by logging the date and time the submission was received, assigning a password or other encryption information, and whether the submission has been reviewed and selected by the creator or not. The content development may include one or more submissions and/or data from interactive features according to step **526**. In step **528**, the submitter or submitters may, in conjunction with the efforts of the creator, contribute to the development, story line and/or outcome.

Once the development and adaptation process is completed, step **530**, the content is released to the audience for review per step **532**. The submitters whose material was selected and used in the released content is given credit in step **534** (for example listed on either the opening or closing credits of a television program). The selected submitters are also preferably rewarded with cash or other prize awards. The audience then has the opportunity in step **536** to vote for and rank the released content. For example, for each television episode the audience may rate it on a scale from 1 to 10. This ranking is preferably conducted through the Internet but may also be done through telephone, print media, such as newspapers, or mail-in ballots. At the end of the season the audience can select or rate their favorite episode of the season. In steps **538** and **540**, the highest rated concept submitters receive rewards in the form of credit payment, cash or other rewards. For example, where a selected submitter whose submission material is released in the media content may be paid $1,000 to $25,000, the top reward for the highest rated media content may be $1,000,000 or more. Provision for the next three highest rated contents may be given a trip or a smaller reward. After the payment module is initiated in step **542** for paying the selected and highly rated submitters, the content is archived in step **544** for internal creator purposes such as reruns, for example. If the content is re-released, such as the case of reruns, the selected submitters whose material is contained within the media content may be payed or otherwise rewarded, if this right has not been relinquished previously by the disclaimer or other agreements, as determined between the creator or third party and the selected submitters.

Instead of an interactive format, in step **546** the submitter may choose an open content submission format. Once again, in step **548**, all communications and submissions are encrypted for authorization and security purposes. In step **550**, the end user submitter is automatically entered into a contest when making submissions in an open format. The open content submission format includes the submission of ideas, stories, music, lyrics, scripts, manuscripts, screenplays, digital photographs, etc. which cannot be submitted in an interactive format, step **552**. In order to enter the open format, the end user may be required to pay a fee for entering the submission contents, step **554**.

In step **556**, the end user submitter receives a predetermined number of points to enter sweepstakes or purchase awards, as described above and more fully described in FIG. **13**. In step **558**, the submission content is then transmitted to the central controller **200** and stored.

The end user submitter, in step **560**, can be given information regarding copyright, trademark and patent services. The creator may have the capabilities of offering such services to the submitter in order to protect the submitter's material, as more fully described in FIG. **12**. In step **562**, the end user submitter is also given the option of placing the submission material on an open exchange for access to third parties interested in acquiring such material. In step **564**, the submitter may place an opening bid or initial offer on the submission content material so that he or she is guaranteed that amount of compensation.

Although the submissions are encrypted and otherwise protected from access and theft, the submitter may purchase protection insurance through the open exchange so that the open exchange, instead of the individual submitter, will prosecute thefts of submission materials by third parties. Due to the electronic tracking of the submissions, the third party who has accessed and copied the submission material should be readily ascertained. The pooling by the many submitters who participate in the insurance program give the open exchange the resources to find and prosecute those third parties who are able to steal submission material.

In step **568**, the submitter may check the status of the submission at any time after transmission to the central controller **200** as described above. Once the submission is received and stored, the creator in step **570** can search the submission content databases for desired content. Once the creator in step **572** has selected a content submission, a

cross-check process is initiated, step **574**. Once the submission is confirmed as being original or sent before other similar submissions in the cross-checking process of step **574**, the creator notifies the submitter that his or her submission has been selected at step **576**. The creator in step **578** continues communication with the submitter for content development and adaptation. The content development may include one or more submissions and/or data from interactive features according to step **526**. In step **528**, the submitter or submitters may, in conjunction with the efforts of the creator, contribute to the development, story line and/or outcome.

Once the development and adaptation process is completed, step **530**, the content is released to the audience for review per step **532**. The submitters whose material was selected and used in the released content is given credit in step **534**. The selected submitters are also preferably rewarded with cash or other prize awards. The audience then has the opportunity in step **536** to vote for and rate the released content. For example, for each television episode the audience may rate it on a scale from 1 to 10. This ranking is preferably conducted through the Internet but may also be done through telephone or mail-in ballots. At the end of the season the audience can select or rate their favorite episode of the season. In steps **538** and **540**, the highest rated concept submitters receive rewards in the form of credit payment, cash or other rewards as described above. After the payment module is initiated in step **542** for paying the selected and highly rated submitters, the content is archived in step **544** for internal creator purposes such as reruns, for example, before ending the process **580**. Payment for the re-release may be made as described above.

While the steps in the process of the invention have been generally discussed above, subroutines and particular processes of the invention are more fully described in detail in the following description.

Registration

Upon interfacing with the creator's networked central controller **200** at step **602**, the system queries whether the end user is registered, step **604**. If the end user is not registered, the system in step **606** asks the end user whether he or she would like to become a member. If the end user desires to become a member, at step **608** the end user is prompted for personal information. These prompts may be in the form of graphic user interface windows in which the end user enters information before proceeding to the next window, as is well known in the art. Registration will typically comprise granting of general background information on the submitter including, name, address, phone #, e-mail address, age, gender, marital status, employment, income, and the like. The user in step **610** is then either assigned or allowed to select an ID. An instructional page is presented to the end user in step **612**, which includes information regarding the parameters and rules of being a member. As part of the registration process the user must agree to a disclaimer, giving up all rights to the idea and/or allowing the creator to use the submitted material for its purposes, among other things. The end user/submitter will also be asked to acknowledge that he or she has read the instructional page. Disclaimers may be conducted by electronic submission, electronic mail or through paper mail. If either the end user declines to agree with the disclaimer in step **614** or otherwise decides not to become a member, the process is ended at step **616**. If, on the other hand, the end user decides to become a member and agrees to the disclaimer, the end user then selects a submission format in step **618** before submitting media material and ideas. The registration process at step **620** is then ended.

If the end user interfacing with the system is already registered, he or she may be asked to reaffirm an instructional page disclaimer at step **622**. In response, the end user provides his or her ID at step **624** before proceeding to the submission format selection at step **618**.

Requests and Submissions

Referring to FIGS. **7** and **8**A-**8**B, requests may be made either asynchronously as described in FIG. **7** or synchronously as described in FIGS. **8**A and **8**B. At step **700**, an asynchronous request is made from either a creator or a third party end user via the open exchange as described in detail below. At steps **710** through **740**, the requester determines which medium to use for the asynchronous request. In the preferred embodiment, as shown in step **710** a web site, interactive television, etc. are used. In step **720** e-mail is the asynchronous communication method of preference. Step **730** mailed-requests, and step **740** telephone, IVRU (Interactive Voice Response Unite), etc. are other sample asynchronous communications methods that are both very applicable and suitable to the present invention. Others such as fax, beeper, pager, radio, television broadcast, or any other developing or future form of communications, etc. also apply. Alternatively, any combination of the above mentioned may also apply. For example, a message might be sent to a member's beeper, telling him/her to check his/her e-mail for the complete request. One exemplary object of the present invention is the delivery of requests for content material, which in turn results in corresponding content material submissions. The communications method is merely the delivery mechanism and is secondary to the object of creating network/people driven multi-media.

At step **750**, the member and/or potential submitter must provide an ID number and/or password to respond to the content material request, which applies to any selected channel of communication. In step **760**, the actual request is made from a creator or third party end user, and if a corresponding submission is made, it is presented at step **770**. The submission can also be presented in an open format, step **780**, before ending the process **790**.

FIGS. **8**A and **8**B illustrate synchronous content material request by either creators or third party end users via the open exchange. There are several embodiments for synchronous communications that may apply to any form of synchronous communications contained in the present invention: one creator or third party end user to one end user (end users in this reference may be people, members, or submitters); one creator or third party end user to many end users; many creators or third party end users to one end user; and many creators or third party end users to many end users. Although protocols will be described in detail for one creator or third party end user to one end user communications, those skilled in the art will appreciate that these protocols may be applied to all four embodiments.

In the described embodiment, the creator or third party end user and the end user may exchange in a series of content material requests and/or submissions using a one-to-one synchronous communications channel such as telephone, real-time text messaging or video conferencing. The creator or third party end user can request a synchronous communication channel when he/she makes his/her initial content material request using any of the embodiments of the present invention including the asynchronous communications embodiment and the interactive synchronous embodiment.

Although many synchronous communications channels may be used, in this embodiment an online messaging system is described which uses a standard online service to provide the real-time text-based communications link between the creator or third party end user and the end user. Preferably, a continuous communications channel is established between the creator or third party end user and end user using a message window. The Message window is a text-based computer "window" displayed on video monitor **430** of interface architecture **400**, in this case both or many having access to interface architecture **400**. The creator or third party end user types requests directly to message window which appears on video monitor **430**. Simultaneously, the end user, which once again may be people, members or submitters, sees the request on his/her video monitor **430**, and vice versa. The requests and submissions may take the form of a true request, questions and answers, comments, feedback, ideas, stories, written materials, etc. any form to present content materials.

Referring now to FIGS. **8**A and **8**B, there is shown how end users access the message window. At step **800**, an end user whom may or may not be a member connects to an online service. Examples of online services include, American Online, Compuserve, the Microsoft Network, Netzero, or even BBS, etc. The online service, however, only acts as the interface for the present invention. Control of end user, creator, or third part access, searches, billing and payment, and other function resides at the central controller **200**. Online services act merely as a convenient conduit for synchronous communications given their ability to handle tens of thousands of simultaneous communications. In another embodiment, central controller **200** handles all synchronous connections directly, eliminating the need for online networks. At step **810**, a communications channel is opened between central controller **200** and the online service. The communications channel is a direct electronic link such as a circuit switch or packet switched network connection. Once the connection has been made the end user provides his/her ID number at step **820** to gain access to the network. If the end user is a non-member, he/she may begin the registration process beginning at step **600**.

After the end user has been authorized to enter the system, he/she selects an interactive feature at step **830** to participate synchronously with a creator or third party end user to submit content material. Once a feature is selected, central controller **200** assigns message window **840** to the end user. The end user may be required to provide a password to central controller **200** prior to gaining admittance to message window **840**. If additional security is required, the end user, creator, third party end user or whomever is entering the message window at the time may be required to produce a password and/or submit to a challenge/reply protocol in which he/she must produce a piece of information known only to that person, such as his/her mother's maiden name or his/her social security number. If an interactive feature is not live, the end user may have the option of having the central controller **200** send a message to a creator or third party end user (via e-mail, fax, telephone, beeper, etc.) stating the online session is available at step **850**. If central controller **200** does not receive a response within a predetermined time central controller **200** sends a message to the end user and allows him/her to select another interactive feature. Anytime a end user/member enters a message window the central controller maintains a log of whom entered, the date, the time and for how long.

To complete the synchronous communication link, at step **855** the creator or third party end user also connects to an online service, which might be a direct link to central controller **200** or a similar online service like those previously mentioned. The online service or direct link connects the creator or third party end user to central controller **200** at step **856**. For security purposes, the creator or third party end user must also provide an ID number and/or password at step **857**. While only one creator or third party end user is represented by this description, there may be many depending on the application of the present invention in order to facilitate the purpose of receiving content material. The connection now can be made with the end user/users.

Step **860** determines if the creator or third party end user will connect alone, possibly in an IM (Instant Message) situation or in a group forum, known as a chartroom if the Internet is the chosen embodiment. At step **870**, if the creator or third party end user is alone the creator or third party end user enters the message window alone and begins communication at step **890**. If the creator or third party end user is not alone, the creator or third party end user and the other people and/or members steps **881**-**885** enter the message window together, step **880**, along with the end user just entering, step **886**.

At step **890**, communication begins, where end user/users type ideas, stories, comments, questions, etc. to respond to creators or third party end users requests. End user/users may also communicate openly without regard to a specific request. In step **895**, questions, ideas, and comments are exchanged between the creator or third party end user and the user/users for the purpose of receiving content material and developing content. At step **896**, the end user or users leave the message window to conclude the synchronous communication module and the process ends at step **898**.

In an alternative embodiment, end users and creators or third party end users can be connected directly using synchronous communications channels such as the telephone network. In this embodiment, the end user calls central controller **200** and connects to the IVRU (Interactive Voice Response Unit). The end user is prompted to respond to requests similar to those described in the asynchronous content request of FIG. **7** and synchronous content request of FIGS. **8**A and **8**B. The end user enters his/her ID, selects the subject, submission-type, and provides categorical information via the IVRU prompts, as more fully described in FIGS. **9**A and **9**B. Central controller **200** then automatically stores the content material made available for searches and/or directs the material to the appropriate creators and/or third parties.

After a request has been made as described above and is received by an end user and/or member, the submission process begins. Content material submissions may occur through either interactive feature, illustrated in FIG. **9**, or the open content format, illustrated in FIGS. **10**A and **10**B. There might be other formats or methodologies not mentioned here but that also apply. A fee may be required for content submissions, especially in the open content format, depending on the purpose of the request and if the submission is a part of a contest format.

FIG. **9** illustrates content material submissions made through what are referred to as interactive features, which include but are not limited to the following: questions and answers, sentence or story completions, fill-in-the-blanks, multiple choice questions, polls, surveys, games, etc. or other unique features presented by creators or third party end users. The preferred embodiment emphasis the electronic transfer and storage of such content material.

Referring now to FIG. **9**, the end user and/or member selects the medium in which he/she is to submit content

material at step **900**. This may be in response to a request or just an open desire to participate. Just as there are many way to make content material requests, there are many ways to make content material submissions, which are all appropriate and suitable to the present invention. Steps **810** through **840** represent some of the practical methods currently available to submit content material as presented in this invention. At step **810**, web site, interactive television, etc. represents methods in which content may be broadcast, and because these samples enable interaction they may also receive data, which in this case may take the form of content material submissions. Other not listed or evolving communications may also be represented by this category. Because these media types enable menu display capabilities, end users at step **912** are able to select the interactive features section of the web site or interactive television format presented, and henceforth the desired interactive feature. Depending on the format, the end user and/or member may have to present an ID, password or other identification information at step **914**, either immediately after arriving at the interactive features menu or after selecting a desired feature. If the end user is a non-member, he/she may begin the registration process beginning at step **600**.

At step **920**, electronic mail submissions will typically result from end users responding to e-mailed content material requests. However, open content material responses may also be accepted if they apply or are relevant to interactive features presented by creators and/or third party end users as illustrated in FIGS. **10**A and **10**B. At step **922**, an end user looking to participate in an electronic mailed interactive feature can do so by replying to the e-mail, which is standard protocol on the Internet and well known in the art. If the end user is a member he/she will be asked to provide an ID at step **924**, otherwise non-members may begin the registration process beginning at step **600**.

At step **930**, mailed submissions are covered wherein the end user receives an interactive feature content request or requests and responds accordingly through the mail. At step **932**, he/she selects the desired feature in which to participate and at step **934** he/she may be required to provide ID or register as previously mentioned.

Step **940** is similar, but the communications medium for the submission is the telephone or an IVRU (Interactive Voice Response Unit). At step **942**, the end user listens to the interactive features menu and selects one or more than one to make a content material submission. Once again ID is required at step **944**, and registration may also be needed. While these mentioned are some of the content material submission methods, there may be many more that also come under the application of the present invention.

Regardless of the selected submission medium, at step **950** the end user must complete and respond to the selected interactive feature or features in order to make a content material submission. At step **955**, if the submission is made over the Internet it is encrypted for authentication and security. At step **960**, the submitter for his/her participation receives a pre-determined number of points towards sweepstakes entries and cash and/or merchandise awards as discussed in more detail below. At step **970**, based on the type of interactive feature presented, the submitter may be limited to the number of responses per feature. Those limits will be disclosed prior to participation. Once a submitter completes and interactive feature, they may select another feature at step **980** before ending the process at **990**.

As shown in FIGS. **10**A and **10**B, the content material can also be submitted through the open content format. The procedures are essentially the same, but the open application enables the content material to be presented in either an existing multi-media format or any such method that best suites the interests and objectives of the submitter. End users may either openly submit content material or respond to specific requests made from creators or third party end users. Some of the formats that apply to the open application include, but are not limited to the following: movies, screenplays, television scripts, book manuscripts, plays, music, music lyrics, newspaper and magazine articles, comic stripes, sweepstakes, print media like calendars, greeting cards, novelty items, digital photographs, etc. as well as any other form of literary work or idea that might be non-protectable or protectable through either copyright, trademark, or patent rights. The preferred embodiment emphasis the electronic transfer and storage of such content material.

Referring now to FIGS. **10**A and **10**B, the end user selects a medium to transfer content material through the open content format at step **1000**. The preferred transfer mediums for the open content format remain the same as described above for the interactive format. At step **1010**, the end user selects to transfer content material via a web site, interactive television, etc. At steps **1011** and **1012**, the end user selects the open content submission section of the selected format and then provides his/her ID and/or password, respectively. Depending on whether the end user is a member, registration may be required. At step **1013**, because the content material is presented through an open format, the material must be given a title if it applies as well as categorical information to classify the submission, provide background data, convey the intentions of the submitter, etc. At step **1014**, the content material is placed in a sessions variable to be stored and transmitted to the central controller **200**. Additionally, in step **1015** a "cookie" with the end users information is written to the end users computer. The function and application of "cookies" is well known to anyone of ordinary skill in the art. At step **1050**, the content material is officially submitted via an electronic transfer to central controller **200**.

At step **1020**, electronic mail is the selected medium to transfer an open content material submission. Preferably, this medium will be used in response to an electronic mailed request for open content material. However, an end user may freely submit open content material without regard to a specific request. In steps **1021** and **1022**, the end user replies to an electronic mail received open content request, and provides his/her ID and/or password, respectively. Depending on whether the end user is a member, registration may be required. At step **1023**, the material must be given a title if it applies as well as categorical information to classify the submission as mentioned above and discussed in the received electronic mail. A "cookie" with the end users information may also be written to the end users computer before being submitted at step **1050**.

At step **1030**, mail or shipping is the selected medium to submit open content material. The end user submitter may either respond to a paper mailed request or freely submit open content material without regard to a specific request. At step **1031**, the end user may have to provide required information including ID, and registration may be required. At step **1032**, the end user packages the media content material, literary work, video tapes, art work, pictures, music, lyrics, or any other media form that may be mailed or shipped, etc. At step **1033**, the end user must present a title to the submission material if it applies as well as categorical information as mentioned above. Accordingly, at step **1034** the end user mails or ships the content material to a specified address as a means of submitting the material per step **1050**.

At step **1040**, like the alternative request embodiment aforementioned, content material submissions may also be received through the telephone, IVRU (Interactive Voice Response Unite), etc. The process is similar, but end user submitters are specifically using the medium to submit materials either in response to creator or third party end user requests or on their own accord to make an open content material submission. At steps **1041** and **1042**, the processes are the same as the other open content submission mediums, the end user provides both an ID number and/or password as well as a title and categorical information as requested, respectively. At step **1043**, the end user is prompted to recite the submission either to a live person or an IVRU. All of the necessary prompts are given to complete the process for submission, step **1050**.

Regardless of which transfer medium is selected, the content material is submitted at step **1050**. In the preferred embodiment, the content material is electronically stored in files and transferred via the Internet through the network method and apparatus previously discussed. If the Internet is the transfer medium the material is encrypted for authentication and security. At step **1060**, confirmation is made with the submitter and the network to confirm the receipt of the submission. At step **1070**, the submitter for his/her participation receives a pre-determined number of points towards sweepstakes entries, cash and/or merchandise awards as discussed in more detail below, before ending the process at step **1080**. Preferably, an algorithm is employed in order to prevent an end user from wrongfully acquiring points by submitting the same submission to the creator over and over again. Such an algorithm preferably includes a tracking mechanism which determines if the member has made a previous submission within the category, if a limit applies. This algorithm is particularly applicable to the interactive submissions where entering a form and re-sending the form is possible.

It is important to note that any combination of those previously mentioned or not mentioned communication or transfer mediums may account for a request or submission of content material as described in the present invention.

Authentication and Security

Authentication of the member/submitter and creator or third party end users typically involves checking the attached ID or name and comparing it with those stored in member/submitter database **255** and creator/third party end user database **260**. The network provides a self-policing service to its members by prosecuting those found in violation, and if submitters elect they can purchase a legal services insurance through the network, as described above, where for a small fee the network will provide necessary legal protection and recourse which is particularly applicable to the open exchange described below.

The self-policing function is facilitated by the sophisticated capabilities of the modern day electronic network. The network will track and maintain an electronic paper trail of anyone who interfaces with the network whether it's an end user, member, submitter, creator, third party end user, employee, hacker, etc. The electronic paper trail will include such data as who or whom made submissions, requests, opened and closed files, applied for registration, and the like as well as dates, times and if applicable reasons for such actions. For example, creators and third party end users will have to electronically document both their reason for opening a file, and if they intend any further action with the content material. The data compiled for the electronic paper trail will be processed through central controller **200** and the majority of it stored in audit database **305**. Therefore, if a submitter claims someone inappropriately used his/her content material, the network can electronically track who opened the file and his/her reasons for doing so. Tracking end users actions is well known in the art, so a detailed description of its functionality is not needed.

Moreover, content material stored in content database **275** cannot be printed at interface architecture **400** by anyone who happens to join the network, unless otherwise authorized. Submitters will be able to legally protect content material through a Copyright, Trademark, and Patent service link illustrated in FIGS. **12**A and **12**B via interface architecture **400**, eliminating much of the concern of presenting content material on a network.

Although the above described procedure works well for normal submission and creator selection operations of the invention which are in a low security environment, the security can be significantly improved if necessary (as in the case of the open exchange where there is concern of theft of the submission material or circumvention of the system) through the use of cryptographic techniques. These techniques not only enhance the ability to authenticate the sender of a message, but also serve to verify the integrity of the message itself, proving that it has not been altered during transmission. Encryption can also prevent eavesdroppers from learning the contents of the message. Such techniques shall be referred to generally as cryptographic assurance methods, and can include the use of both symmetric and asymmetric keys as well as digital signatures and/or hash algorithms.

The practice of using cryptographic protocols to ensure the authenticity of senders as well as the integrity of messages is well known in the art and need not be described here in detail. For reference, one of ordinary skill in the art may refer to Bruce Schneier, Applied Cryptography, Protocols, Algorithms, And Source Code In C, (2d Ed, John Wiley & Sons, Inc., 1996).

FIG. **11** describes a symmetric key embodiment in which the submitter and central controller share a key. Thus both encryption and decryption of submissions are performed with the same key. This encryption may be implemented with an algorithm such as DES (U.S. Government standard, specified in FIPS PUB 46), or with any of several algorithms known in the art such as IDEA, Blowfish, RC4, RC2, SAFER, etc. The submitter encrypts content material with his assigned symmetric key at step **1100**, using cryptographic processor **435** of interface architecture **400**. The key may be stored in information storage **470** or otherwise stored or memorized by the submitter. The encrypted content material is then transmitted to cryptographic processor **210** of central controller **200** at step **1110**. Cryptographic processor **210** extracts the submitter ID from the message at step **1120** and looks up the symmetric key of the submitter in cryptographic key database **290** at step **1130**, decrypting content submission material with this key at step **1140**. Cryptographic key database **290** contains algorithms and keys for encrypting, decrypting and/or authenticating messages. At step **1150**, if the resulting message is intelligible, then it must have been encrypted by the same key, authenticating that the submitter must have indeed been the author of content material.

This procedure makes it significantly more difficult for an attacker to represent himself as a submitter. Without cryptographic procedures, an attacker who obtained sample content material from a given submitter would be able to extract the submitter's ID and then attach this ID number to any of the attacker's content material. When the message has been encrypted with a symmetric key, however, an attacker

obtaining sample content material only discovers the submitter's ID number, not the symmetric key. Without this key, the attacker cannot create content material that will not be discovered by central controller **200**, since he cannot encrypt his message in the same way that the authentic submitter could. The symmetric key protocol also ensures that the message has not been tampered with during transmission, since alteration of the message requires knowledge of the symmetric key. An encrypted creator or third party end user content material request also provides the creator or third party end user with more anonymity.

While step of encrypting IDs and/or passwords may not be illustrated in every figure, its inclusion is applied to the invention as deemed necessary to ensure greater authentication and security and to prevent the circumventing of the network. The symmetric key protocol is one exemplary sample of an authentication and security technique, and there are many more that perform essentially the same function. For example, those know to the art may include, but are not limited to, the following: an asymmetric key protocol with two such algorithms or the procedure—RSA and DSA; a cryptographic technique using digital signatures with one such algorithm—DSA (Digital Signature Algorithm); and biometric devices such as a fingerprint reader, voice recognition system, retinal scanner and the like.

Intellectual Property Protection Information and Services

Referring to FIGS. **12**A and **12**B, after the end user submits the media content material at step **1202**, the submitter is queried whether he or she would like information on the available legal protection for the submission at step **1204**. If the submitter is interested in such services, a copyright, trademark and patent (CTP) service link is initiated at step **1206**. The CTP service link provides instruction, document procurement and legal assistance to the submitter, step **1208**.

The service will determine if the submitted content is legally protectable at step **1210**. If it is not, the submitter is notified that the material has been rejected and most likely not protectable, preferably electronically such as by e-mail, at step **1212** before ending the process at step **1214**.

If it is determined that the submitted content may be the subject of intellectual property protection, the content submitter is directed to the appropriate protectable rights link at step **1216**. These links include the copyright link at step **1218** which may provide a hyperlink to the United States Copyright Office, forms for downloading or provision of information upon which the service can file for copyright registration. Links to law firms in the submitter's geographic area which specialize in intellectual property and copyright issues can also be provided. In addition, at step **1220** the submitted content can be archived and the author's personal information and date of submission logged for future reference in the event the author must prove that he or she was the first and original creator of the submitted work.

If the submitted content is determined to be the subject of a trademark or the like, at step **1222** the submitter is linked to an appropriate trademark link. Appropriate trademark assistance and document procurement for the preparation of trademark filings within the United States Patent and Trademark Office can be obtained or information requested for the preparation of such documents at step **1224** before actually filing the appropriate documents and applications at step **1226**. Hyperlinks can be provided the submitter to Internet sites such as the United States Patent and Trademark Office and local law firms if the service does not prepare such documents and filing papers.

If the submitted material is deemed to be patentable, the submitter is transferred to a patent link at step **1228** where information and documents regarding patents are provided at step **1230**. Hyperlinks can also be provided to the United States Patent and Trademark Office or other pertinent sites. If the service has the capabilities and personnel to prepare and file patents for the submitter, the necessary communication and information is given and the service prepares necessary documents and applications and submits the same to the United States Patent and Trademark Office (USPTO) at step **1232**. In any event, after providing the information and/or services to the submitter, an appropriate billing/payment module is initiated at step **1234**, as more fully discussed herein. At step **1236**, the appropriate legal protection has been applied for or provided before ending the process at step **1238**.

The Points Award Program

Computerized marketplaces of all kinds are well known in the art. Today, all modern stock, bond, and commodity exchanges are supported by underlying computerized databases and related systems that enable them to function. Typically, electronic exchanges are designed to facilitate commercial transactions or tokens of ownership, such as shares of stock, or physical objects such as ounces of gold or a used car. Other exchanges specialize in the sale of information such as that provided by Lexis/Nexis, where users pay fees for access to information or the rights to information, as described in the present invention. While in theory electronic exchanges intend to provide supplemental services to existing marketplaces, most of them never last long enough to add meaningful value to their existence. Most exchanges fail because their unable to motivate significant numbers of both buyers and sellers to use the exchange versus other available market alternatives.

Realizing the shortcomings of the prior art, the present invention includes a number of unique and effective measures to stimulate ongoing user demand and participation. The hallmark of stimulating usership of the network and exchange described herein, is rooted in both a contest and points award system.

The Points System Awards Program is an incentive based campaign designed to both promote and stimulate ongoing usership and participation, regardless of whether the submitter has content material selected or not. While it is the intention of every submitter to have content material submissions selected for multi-media use, there will be a large number of submissions that will never be used. This realization might discourage membership participation, so in an effort to maintain interest and enthusiasm, the present invention includes a points award program for any level of participation with the network and/or the open exchange. Submitters will receive a pre-determined number of points depending on their participation in either interactive features or submissions via the open content format.

The accumulated points may be used to purchase cash and/or merchandise awards, and will serve as entries into daily, weekly, monthly, or annual sweepstakes. All of the points used as entries toward sweepstakes will be subject to a daily limit, which will be reflected in a real-time points counter on the member's screen. Each member will be limited to the number of entries they can accumulate per day; a limit must be set in order to comply with sweepstakes laws. Submitters may accumulate points after reaching the limit, which may be traded in for pre-determined awards. To accumulate points submitters must be registered members of the network and/or exchange. There also may be limits to registration such as age and resident requirements. To be

eligible to win the sweepstakes drawing, the submitter must only have one account registered. Odds at winning sweepstakes drawings will depend on the number of entries submitted, and the number of entries collected by other participants in the sweepstakes.

Entry forms may include but are not limited to, web site, electronic mail, mail-in, phone, IVRU, fax, beeper, and other data transfer methods accepted. Entry forms are based on submission forms, which have already been discussed in detail in other sections.

Sweepstakes winner must execute and return an affidavit, a liability release, and where lawful, a publicity release within seven days of notification. Failure to return documents timely, or if prize notification or prize is returned as non-deliverable, may result in disqualification with and alternate winner selected.

As submitters click from page to page in the preferred embodiment, and participate in the interactive features or open content formats, the real-time points counter will automatically update to reflect the new points that have been accumulated towards either the sweepstakes drawings or the awards program.

Referring now to FIG. **13**, an illustrative example of the points awards program is illustrated. At step **1300**, the end user and soon to be submitter interacts with the network through either interactive features or submissions via the open content format. The submitter may interact with the network through such mediums as those listed in steps **1305**, **1310**, **1315**, and **1320** web site, electronic mail, mail-submission, and phone, IVRU, etc., respectively. These examples are just illustrative in nature, there may be other communication methods as well and they may also apply. The preferred embodiment, however, for the present invention is the Internet as has been previously described. At step **1330**, the end user or submitter's participation is tracked through all of the mediums described. At step **1340**, points are logged at pre-determined rates based on the level of participation with either interactive features or submissions via the open content format. Accordingly, at step **1350** the end user or submitter's points are transmitted to central controller **200**. At step **1360**, the submitter's points are tallied and stored in the individual account of the submitter in member/submitter database **255**. At step **1370**, the accumulated points of the submitter are displayed on a real-time online register. At step **1380**, the points may be used as entries in daily, weekly, monthly, or annual sweepstakes. Additionally, the points may also be redeemed for cash and/or merchandise awards as described in step **1390** before the process ends at step **1392**.

Submission Status Check

With reference to FIG. **14**, the end user can check the status of his or her submission at any time after transmitting it to the creator central controller **200**, steps **1402** and **1404**. Once the submitter wants to inquire into the status of the submission, step **1406**, he or she preferably interfaces with the creator website, or alternatively calls an interactive voice response unit system or the like, step **1408**. At step **1410**, the submitter selects the status check feature after interfacing with the system and then provides his or her ID number, step **1412**.

Instructional pages explaining the status categories are given at step **1414** and the status of the submission is listed at step **1416**. Preferably, the status categories are developed and written by a legal department to prevent any potential liability to the creator and its service. The submitter then leaves the status feature at step **1418** or repeats the process if he or she has transmitted more than one submission at step **1420** before ending the process at step **1422**.

Search, Selection and Cross-Check

One of the most pervasive objects of the present invention is to expand the creative reference for multi-media content development to a world wide application via the Internet, as described in the preferred embodiment. The method and apparatus described herein purports the utilization of an electronic network to produce network-driven or people-driven content and the cornerstone of that network is the search, selection and cross-check process used by the creator or third party end user receiving the submissions. The process of searching and finding desirable content material has been greatly enhanced by the sophisticated topic spotting and other searching capabilities made available today, such as those presented in the following patents: U.S. Pat. No. 5,826,260 to Byrd, Jr. et al.; U.S. Pat. No. 5,983,221 to Christy; and U.S. Pat. No. 6,012,053 to Pant et al. (all of which are hereby incorporated by reference).

The search, selection and cross-check process is available via the network to both creators and/or third party end users with possible alternative embodiments to meet the requirements of specific search requests. Those connected to the network will have advantages never before experienced in the world of multi-media due to the link with an infinite number of resources and end users made available through the Internet. For the first time, creators and/or third party end users will be able to elicit an unlimited network of ideas, real life experiences, literary works, music, video and other forms of multi-media content material. The object of the interactive content development process is to expand the creative frame of reference to develop more creative and dynamic forms of multi-media content.

The interactive environment will also enable creators and/or third party end users the ability to survey end users opinions and insights to the direction of content development as well as the outcome to particular content releases. Either way, the ability to utilize selected content material is made available through the both solutions and efficiencies of the search, selection and cross-check process and the methods and technologies described herein.

The search, selection, and cross-check process begins after content material is stored in content database **275**, either the submitter might have forfeited the rights to the content if it was submitted as a part of a contest or the rights might be sold through the open exchange embodiment. The content material may be filtered, either upon arrival or at a designated time interval, based on key words in the title and/or text as well as categorical information supplied by the submitter. The search and cross-check systems may include, but are not limited to the following types of searches: pre-selected and open searches.

Pre-selected searches have a filtering mechanism which attempts to determine the best possible creator or third party end user for the submitted content material based on topical information gleaned from the title, text, or categorical information supplied by the submitter. The criteria for the filter would be provided beforehand by the creator and/or third party end user. The content material is then automatically directed to the appropriate creator and/or third party end user. Electronic mail filters would be the preferred embodiment for the pre-selected search process, which are well known in the art. In addition to e-mail, there are many alternative pre-selected search techniques, which may serve the purpose of the invention.

Referring to FIG. **15**, this illustrative example demonstrates a preferred form of the pre-selected search process.

At step **1500**, the creator or third party end user selects the pre-qualifying search criteria method, which may include but are not limited to the following samples, keyword, boolean, string, etc. listed in steps **1510**, **1520** and **1530**, respectively. After selecting a method, the creator or third party end user selects the criteria for the filtering process and enters it based on the rules of the search type at step **1540**. The selected search criteria is transmitted to central controller **200** at step **1550**. If filtering is done solely on topical information supplied by the submitter, the central controller **200** can direct the categorically identified content material utilizing content database **275** and subject database **280** to the appropriate creator or third party end user. At step **1560**, central controller **200** creates an electronic filter base on the criteria submitted by the creator and/or third party end user. After the filter is set, any incoming content material is filtered and redirected automatically to the appropriate creator or third party end user at step **1570**. At step **1580**, the content material is stored in the appropriate file of the creator and/or third party end user in creator or third party end user database **260**, **270**. The stored content material is then reviewed, with additional electronic search measures if necessary, by the creator and/or third party end user at step **1590**, and desired content material is selected before ending the process at step **1592**. The creator and/or third party may utilize a bookmarking scheme for designating submissions into categories of interest or topics. Thus, when re-searching the submissions, these materials can be more easily accessed. The searches can also be tagged with a "live or die" function so that after a pre-determined period of time has elapsed, the search does not accept any additional submission materials. This would be helpful, for example, when a contest for submission material has a defined time limit for entries. This can also be helpful when meeting a deadline for content release.

The second search type discussed is open searches, which are performed in the same manner someone online visits one of the major search engines such as American Online, Yahoo, Alta Vista, Lycos, Ask Jeeves, etc. to search for specific topical information. The process is essentially the same but the creator and/or third party end user is conducting the search for the purpose of finding appealing content material to develop multi-media. The searches might be purely random, where the creator or third party end user is just screening submissions vicariously, or the searches might be more advanced with more specific topical categories being targeted. In the preferred embodiment, open searches and pre-selected searches will be performed by a sophisticated text parsing technology, which are well known in the art, that scans the text and conducts an electronic comparison to determine if the content material meets the conditions of the criteria provided. In essence, the open search process utilized in the present invention is analogous to one of the major search engines, which are commonly known in the art.

Referring to FIG. **16**, this illustrative example demonstrates a form of the open search process. At step **1600**, the creator and/or third party end user selects whether they would like to conduct a search of a particular content database **275** or all or the content databases in data storage device **250**. At step **1610**, the creator and/or third party end user pre-selects a content database **275** or topical category to conduct a search, or alternatively at step **1620**, all of the content databases are selected in storage device **250** to conduct a search. Once the area of the search is selected, the creator and/or third party end user must select the search type method at step **1630**, which may include but are not limited to the following samples, keyword, boolean, string, etc. listed in steps **1635**, **1640** and **1645**, respectively. After selecting a method, the creator and/or third party end user selects the criteria for the search and enters it based on the rules of the search type at step **1650**. Accordingly, at step **1660** the search criteria is transmitted to central controller **200**. At step **1670**, central controller **200** creates an electronic filter base on the criteria submitted by the creator and/or third party end user. The resulting submissions meeting the requirements of the electronic filter are subsequently transmitted back to the creator and/or third party end user, where desired content material can be selected. After finding the desired material based upon the search, the creator and/or third party selects that material, by downloading or otherwise, for use before ending the process at step **1690**.

While the search types which have been discussed are used to demonstrate the searching functionality of the search and selection process, there are many other search applications known in the art or that are being developed and they may also apply to the present invention. More importantly, the search types ultimately used might be used independently, in tandem, reverse order or in any combination that satisfies the searching needs and objectives of the creator and/or third party end user. For example, referring to the previously discussed sample search types, the creator and/or third party end user might elect the pre-selected search function to receive content material in a particular topical category, and then after receiving the filtered content material, he/she might perform an open search to narrow the viewed submissions even further. In an alternative embodiment, the creator or third party end user might not elect to receive pre-filtered content material as performed in a pre-selected search, electing instead to just use the open search type to find desired content material. The search order and use is entirely up to the creator and/or third party end user. Of course, the order or method of searching is not as important as the ability to retrieve desired submission material which is a paramount function of the present invention.

After content material has been selected as a part of the contest, as described above, it is then preferably cross-checked for originality and timeliness. The cross-checking process provides a methodology for creators and/or third party end users to isolate the differences, no matter how fractional, between similar content material submissions. The cross-checking process may be performed with a search system like those previously discussed, in which an electronic text parser scans the text and performs a comparative analysis, or the like, to identify the distinctiveness of the content material in relationship to others in its category. Electronic text parsers, also used in the search embodiment, are a well know art form most often found in major search engines like some of those previously mentioned. In alternative embodiments, this process could also be performed manually although such a process is not preferred for obvious reasons.

The cross-check process is vital to contest formats, because in cases of identical or very similar content material submissions, the creator and/or third party end user may need to identify and award the earliest submission date. This is facilitated by an electronic time stamp that records the date and time of each submission, which is stored along with the content material in content database **275**. Audit database **305** may also be used to store data for this function as well. It is important to note, the issue of submission dates most often applies to content material submitted in a contest format, where conditions apply. The significance of dates might also depend on whether the submission was made in either the interactive feature format or the open content

format. Third party end users might select content material at their own discretion without regard to dates or content material similarities, unless, of course, their content material requests include some form of contest giving preference to submission dates.

Referring to FIG. **17**, at step **1700** the cross-check process begins after the creator and/or third party end user makes a content material selection, and conditions of the selection process require a cross-check procedure. At step **1710**, the content material is checked against similar content material in its topical category either manually and/or electronically. At step **1720**, it is determined either manually and/or electronically whether the content material is similar enough to other submissions to deem further review. At step **1730**, if the answer is no, the cross-check procedure is complete and the submitter's submission is selected and awarded accordingly. If the content material is deemed similar, then step **1740** tries to determine, once again either manually and/or preferably electronically, if there are any discernible differences. If there are, then the differences are documented and stored in audit database **305** at step **1750**. If there are no discernible differences then submissions are considered identical, at step **1760**, central controller **200** extracts data from content database **275** and compares the dates of the similar submissions. At step **1770**, the submission with the earliest submission date is selected and awarded accordingly based on the rules and conditions of the contest, before the process ends at step **1780**.

In the prior art, there have been many drawbacks to the submissions of protectable or non-protectable content material to a network or exchange. The issue of idea pilferage has been the greatest concern, but the solutions presented in the search, selection and cross-check embodiment make the submission of one's ideas or content material, a simple, convenient, and secure transaction.

Referring now to FIG. **18**, after the creator has selected submission material and cross-checked the submission at steps **1810** and **1820**, the creator notifies the submitter at step **1830**. This can occur asynchronously by e-mail, fax, letters, etc. or synchronously by instant message, PCS, telephone or video conference, etc. as shown in steps **1835** and **1840**, respectively. Confirmation of the selection and notification is made at step **1850**. The creator typically continues periodic communication with the submitter, step **1860**, in order to complete the adaptation of the content. Accordingly, at step **1865**, the submitter may continue contribution of ideas and material in order to develop the content, such as the storyline or outcome. Once the creator has completed the adaptation of the media content, step **1870**, the content is released, step **1880**, and the process ends, step **1890**.

The Contest System

A voting and/or rating system may also be instituted for content releases based on content material submissions made to the network and/or open exchange, as described in the voting and rating embodiment. Creators and/or third party end users may incorporate the systems as an added feature to their content releases. For example, at the end of a specific time period, i.e. a season, or immediately after a content release, the public and/or the network members, collectively the audience, will have the opportunity to vote and/or rate their favorite content releases. This may apply to all content or multi-media formats. Voting and/or rating ballots may include but are not limited to the following submission forms: web site, electronic mail, mail-submission, fax, phone, IVRU, and responses to print media like newspapers, magazines, etc. The voting system may be priority based, where the public and/or network members prioritize their favorite releases from most favorite to least favorite, or as simple as vote for your favorite content release. The rating system most likely would be scale based, where parameters to rate content releases would be given. For example, immediately following a content release, the public and/or network members would be given a scale from 1 to 10 to rate the content release, with 10 being the highest point value and 1 being the lowest point value. Content releases are given a title and/or theme name so that the public and/or network members can identify them.

The intent behind the voting and/or rating systems is to reward the content material submitters of the highest rated content releases, providing an additional incentive for end users to participate in the network. Rewards may come in the form of cash and/or merchandise awards.

FIG. **19** shows an illustrative example of the voting and/or rating systems used in accordance with the present invention. At step **1900**, the public and/or network members select the medium in which to vote and/or rate content releases. The public and/or network members may submit their ballots through those methods listed in steps **1905**, **1910**, and **1915** web site, electronic mail, and phone, IVRU, etc., respectively. These examples are just illustrative in nature, there may be other communication methods, such as mail in ballots or the like, as well and they also apply. At step **1920**, the public and/or network user members select whether they would like to vote on content releases in step **1930** or rate content releases in step **1940**. If the public and/or network members elect to rate content releases, they move to step **1950**, where they have typically just seen or heard the content release (for example an episode of a television program using the present invention has just ended) and are given the option to rate the release (on a scale of 1 to 10, for example).

If, on the other hand, the public and/or network user members elect to vote on their favorite content releases, then they move to step **1960**, where they are given the opportunity to review content releases by title and/or theme name. At step **1970**, the public and/or network members are given the option to vote on their favorite content releases, where, for example, they may be able to prioritize by number their most favorite to least favorite releases. Finally, at step **1980** the content material submitters of the highest rated content releases are rewarded with cash and/or merchandise awards, as described above. The scores of the voting and/or rating systems may result in separate winners or be combined using a formula into a single contest with a single winner. The format of the contest is entirely up to the creators or third party end users.

Agency and Sales Services

Ultimately, the network and/or exchange is designed around providing services to members to both promote and protect content material submissions like the Copyright, Trademark, and Patent service previously mentioned. In conjunction with the protection advisory service, the network and/or exchange can also provide agency and sales services, where a team of in-house agents work on behalf of members to promote, pitch, and sell content material submissions to all sectors of the multi-media world. The agents can continually target content material submissions that would be considered appealing to certain sectors of the media world, and then will pursue appropriate vendors to pitch, and sell those selected concepts. This undoubtedly will create more demand for the network and/or exchange, once again addressing one of the major weakness in the prior art of exchanges. In addition, members will also be given the option of paying a fee based agency service in which their

specific content material submissions will be given preference to a wide range of distribution and sales services. Obviously, there is an economies of scale to receiving agency and sales services on an exchange, where services can be provided more economically because of the pooling of member resources. Moreover, existing agency services are typically only available to an elite few who have previous credits, which is a significant shortcoming in the art. Talent and production should be the overriding issue, which is one of the most pervasive objects of the present invention.

Media Submission Open Exchange

By making available content material submissions to third party end users, the present invention provides a novel and efficient exchange network for the development of all forms of multi-media. Network-driven or people-driven forms of multi-media is a new art form for content development that is facilitated through the limitless connections of the world wide web and the electronic file transfer capabilities or the new era, which are emphasized in the preferred embodiment described above. Furthermore, new advanced search methods, as described above, improve search and selection capabilities to the level that creators or third party end users can search and receive content material in a simple, cost and time effective manner.

It is the intention of the invention that in-house creators will stimulate the first layer of demand for content material and that the resulting onslaught of supply will henceforth create the demand from third party end users. Based upon the history of previous and existing exchanges, one of the most prevailing issues and weaknesses of the prior art is the creation of demand, which the present invention has both effectively and successfully addressed through the desire of end users to participate in the systems as well as through the points and awards systems.

FIGS. **20**A-**20**C illustrate the open exchange which can be incorporated into the present invention and the effective application of third party end user purchases of exclusive rights or non-exclusive rights content material. In addition, to content databases being made available through the open exchange, third party end users may also make asynchronous or synchronous content requests to end users. This is performed in the same fashion a creator makes a request as described above in FIGS. **7** and **8**A and **8**B. Third party access enables an entirely new art form to develop multi-media content.

Referring to FIGS. **20**A-**20**C, the third party end user arrives at the Internet location (web site) to search the media submission databases created from previously received submissions in accordance with the invention at step **2000**. Step **2005** determines whether the third party end user is a member of the exchange, if so then he/she provides ID and/or password at step **2010**. If not, the third party end user is required to register at step **2015**, agreeing to the rules and conditions of the exchange via an electronic initial, signature or the like. Preferably, the third party is provided an on-line agreement wherein the third party agrees not to disclose or copy material from the open exchange nor to attempt to contact submitters directly without permission of the creator-host.

The third party may also be required to pay a subscription fee at step **2020**. As a part of the registration process the third party end user is required to provide background data and select his/her ID and/or password at step **2022**. Either way, the third party end user arrives at the search engine feature of the media/content database at step **2025**.

It is important to note, those participating in the exchange are notified of that if a serious violation occurs, such as the utilization of content material without proper consent, then serious prosecution may result initiated by both the exchange and/or the submitter, if the submitter decides to take individual action. The exchange will provide a self-policing service to its members for those found in violation, and if submitters elect they can purchase a legal services insurance through the exchange, where for a small fee the exchange will provide necessary legal protection and recourse. The exchange facilitates an economical form of legal protection because members pool their funds together in an insurance fund, where quality legal services can be retained internally or externally to protect their best interests. This is an advantage the exchange provides that individuals can not receive if they decides to solicit their works on their own.

The exchanges' self-policing function is facilitated by the sophisticated capabilities of the modern day electronic network. The network will track and maintain an electronic paper trail of anyone who interfaces with the network whether it's an end user, member, submitter, creator, third party end user, employee, hacker, etc. The electronic paper trail will include such data as who or whom made submissions, requests, opened and closed files, applied for registration, and the like as well as dates, times and if applicable reasons for such actions. For example, creators and third party end users will have to electronically document both their reason for opening a file, and if they intend any further action with the content material. The data compiled for the electronic paper trail will be processed through central controller **200** and the majority of it stored in audit database **305**. Therefore, if a submitter claims someone inappropriately used his/her content material, the exchange can electronically track whether the accused person had opened the file and his/her reasons for doing so. Various other methods of tracking end users actions are also well known in the art and can be implemented by the invention.

Moreover, content material stored in content database **275** cannot be printed on interface architecture **400** by anyone adjoining the network, unless otherwise authorized. If content material is purchased by a third party end user, they will receive a formal copy of the material after payment arrangement have been satisfied as described in the billing and payment embodiment. Submitters will be able to legally protect content material through the Copyright, Trademark, and Patent service link via interface architecture **400**, eliminating much of the concern of presenting content material on a network.

At step **2030**, the third party end user must select a search type which may include but are not limited to keyword, boolean, string, or any form appropriate to the application of the invention. At step **2035**, after the search type is selected the search criteria must be entered corresponding to the rules of the search type. Step **2040** lists some of the content material forms including but not limited to ideas, stories, scripts, book manuscripts, videos, music, lyrics, digital photographs, etc. At step **2045**, the search criteria is transmitted to central controller **200**. Central controller **200** responds by transmitting the results of the search back to the third party end user at step **2050**.

It is important to note that exclusive rights or non-exclusive rights in the submitted content material may be indicated or an initial offer or minimum bid provided by submitter, step **2055**. This is an option made available to submitters at the time they decided to make their content material submissions available to the open exchange. Sub-

mission content material not made available to the open exchange is only made available to the creators.

Step **2060**, determines whether the third party end user is going to make a bid on any of the presented content material. If not, the third party must elect to either perform another search to find desired content material at step **2065**, or exit the open exchange at step **2070**. If the decision is to perform another search, than the third party end user returns to step **2035**, or step **2030** if he/she elects a different search type, and repeats the entire process over again.

If the third party end user elects to bid on selected content material at step **2060**, the bid is preferably encrypted for authentication and security at step **2075**, and then the bid is transmitted to central controller **200** at step **2076**. Central controller **200** then transmits the bid to the appropriate submitter at step **2080**, where the bid is either accepted or rejected at step **2090**. In step **2085**, contact information is not included with neither the submitted material nor the bid to avoid submitters or end users from circumventing the network. If the bid is rejected at step **2090**, then a rejection message is transmitted to central controller **200**, which may include a counter-offer or request for a higher bid from the submitter, and directed to the third party end user at step **2092**. The rejection or acceptance messages may also be encrypted for authentication and security. After receiving a rejection message at step **2092**, the third party end user may submit a higher bid at step **2094**, and the process repeats itself.

If a submitter accepts a bid, the third party end user is notified via central controller **200** at step **2096**. In step **2097**, purchase rights may be exclusive or non-exclusive based on the agreement between the submitter and the third party end user. After the agreement, the appropriate billing module is initiated based on the third party end user's request at step **2098**. Correspondingly, the appropriate payment module is initiated based on the submitter's request at step **2099**. The exchange may be compensated for content transactions by either internally taking a percentage of the accepted transaction price or attaching an additional fee or override to the offer price, all of which will be discussed in more detail below. These compensation methods are meant to be merely illustrative, however, as there are many equivalent compensation methods either internal or external commonly known in the art which may also be used.

By combining these various elements into an open exchange, the present invention makes finding, selling, purchasing, and utilizing content material fast, simple, and market efficient.

As mentioned previously, the present invention provides for the anonymity of both member/submitters and creators or third party end users. Such anonymity is accomplished by eliminating all references to the names of the individuals for all transactions. A creator or third party end user, for example, would include his/her ID in a request rather than his/her name, preventing the member/submitter receiving request from discovering the creator and/or third party end user's identity. In a similar manner, member/submitters may also want to keep their identity a secret.

This is especially vital in preventing third party end users from contacting submitters outside the system prior to a deal being reached. The third party end user may be prevented from seeing contact information such as phone number or location. If the third party ultimately does not bid on a submission, but is then discovered to have negotiated an agreement with a submitter outside the system, he/she may be charged a usage fee as a percentage of the total value of the negotiated agreement, as agreed to by the third party end user when entering into the initial agreement when registering with the network.

Although the use of ID numbers can provide anonymity, both for members/submitters and creators or third party end users, there are a number of potential weaknesses. First, if the database of ID numbers, stored in member/submitter database **255** or creator/third party end user database **260**, and their respective submitters/third party end users is compromised, anonymity is destroyed since the message sender can be looked up in member/submitter database **255** or creator/third party end user database **260**. To prevent this, the ID numbers are encrypted with the public key of central controller **200**, so that even if it is stolen it is useless without the private key.

There is described a method to prevent this attack using an anonymous mix in U.S. Pat. No. 5,862,223 to Walker et al, (which is hereby incorporated by reference) which can be implemented in the present invention. Anonymous mix uses a protocol to make it very difficult for anyone to trace the path of a message, which passes through the mix. Anonymous mix takes electronic messages from central controller **200** and randomly varies both the length of the messages as well as the timing of its delivery. An incoming message of two hundred kilobytes, for example, might be expanded to three hundred kilobytes by adding random characters at the end. An attacker would thus be unable to correlate (by length of message) the outgoing messages with incoming messages, and vice versa. Furthermore, by adding a random time delay in the processing of electronic messages, central controller **200** also prevents an attacker from correlating (based on time) incoming messages with outgoing messages.

By using a trusted third party and an anonymous mix, the identity of members/submitters and creators or third party end users is preserved. Although we have described only one possible method for maintaining anonymity, there are other equivalents. For example, if the embodiment included telephone messaging, the identity of the submitter and third party end user could be maintained using conventional voice modification techniques. If the request or the submission were in a paper form, the form could be scanned using optical character recognition and translated into digital form, discarding any information that could be found in the original document. Anonymity may also serve to prevent a submitter and third party end user from contacting each other outside the network in order to ensure that payment is received for bringing the two parties together in the exchange. In this embodiment, central controller **200** forces anonymity by blinding one or both parties. The third party end user, for example, may not see the name of the submitter until after the payment has been made.

The authentication and security measures described above take on particular importance with the open exchange and not only may include passwords, encryption, and the anonymous mix, but if deemed necessary even the institution of biometric devices for use between the creator-host and third party.

Fingerprint verification, for example, may be executed before the third party is allowed access to the network, in response to prompts from central controller **200**, at some predetermined or random times, or continuously by incorporating the scanning lens into the third party's device.

An example of such an identification device is the FC 100 FINGERPRINT VERIFIER available from Startek, a Taiwanese company. The FC100 is readily adaptable to any PC via an interface card. The fingerprint verifier utilizes an

optical scanning lens. The submitter places his or her finger on the lens, and the resulting image is scanned, digitized, and the data compressed and stored in memory. Typically, a 256 byte file is all that is required. Each live-scan fingerprint is compared against the previously enrolled/stored template, stored in interface architecture **400**. If the prints do not match, the cryptographic algorithms in interface architecture **400** may prevent the third party from searching for content material.

In a voice verification embodiment, the third party's voice is used to verify his identity. This embodiment has the advantage of not requiring the use of any specialized hardware since it can be implemented over a standard phone connection. The third party's identity is verified at central computer **200**. The process of obtaining a voice-print and subsequently using it to verify a person's identity is well-known in the art, and therefore need not be described in detail herein. One of ordinary skill in the art may refer to SpeakEZ, Inc. for voice identification/verification technology. Conventional speaker identification software samples the third party's voice. This sample is stored at central controller **200**. Each time the third party wants to send content material to central controller **200**, he/she is required to call central controller **200** and speak into the phone at the prompt for a voice sample. If this sample matches that stored in central controller **200**, the third party is allowed access to the open exchange.

Billing and Payment Processes

FIGS. **21-25** show exemplary payment and billing systems which can be used with the present invention. Third party end users are billed for content material submissions received, and submitters are compensated for content material produced and selected as described above. The system can even be set up so as to be capable of ensuring that submitters receive payment for their work, whether or not the third party end user pays. This feature provides additional incentive for submitters to register with the system, as the possibility of bad debt has been eliminated since central controller **200** takes on the risk of not collecting from third party end users. Third party end user invoicing and submitter payment is described using conventional credit card electronic charges, checks, Electronic Funds Transfer ("EFT"), or digital cash. These payment methods are meant to be merely illustrative, however, as there are many equivalent payment methods commonly known in the art which may also be used.

In FIG. **21**, the billing process is initiated when central controller **200** transmits the agreed upon price and tracking number of the submitter and third party end user transaction to billing database **285**, **290** at step **2100**. At step **2110**, there are two billing protocols that can be used. The first, cash on delivery, requires that the third party end user pay before receiving formal copy or the content material. The formal copy may be electronically mailed, postal mailed, shipped, etc. Once the submitter accepts the third party end user bid, the third party will no longer have access to the selected content material in the content database **275**. The second protocol is credit system in which the third party end user pays at the end of the billing period. In the cash on delivery protocol, billing processor **225** generates a bill prior to sending a copy of the formal content material to the third party end user, proceeding immediately to step **2120**.

One exemplary embodiment of a payment guarantee means of the present invention is described as follows. Central controller **200** requires the end user to prepay for at least part of the content being purchased, forcing the third party end user to keep a minimum balance of money in order to be eligible to use the network. Central controller **200** then automatically deducts the price the content material from this escrow account before a formal copy of the content material is sent to the third party end user. Transaction records and balance information is stored in billing database **285**, **290**. Rather than actually depositing the money with central controller **200**, the third party end user might instead be required to merely have sufficient credit available. A credit card on file with central controller **200**, for example, is checked before the third party end user is able to make a bid for content material. If sufficient credit remains in the account, the submitter is notified. If credit available is not sufficient to cover the price of content material, the third party end user is required to provide another credit card number. For EFT transfers, the third party end user's account information is stored in billing database **285**, **290** enabling central controller **200** to check the account balance before the biding process can be initiated.

In a credit protocol, processor **225** searches billing database **285**, **290** by third party end user ID at the end of each billing period and totals the amount owed by each third party end user. It should be noted that in this credit protocol, while the third party does not pay until the end of the billing period, the submitter may still receive payment immediately. Central controller **200** pays the submitter after an agreement has been reached between the submitter and the third party end user. At step **2120**, the preferred billing method is retrieved from third party end user database **270**, and the appropriate billing module (credit card, EFT, check, electronic cash), is initiated at step **2130**.

The process of paying the submitter begins at step **2140** when the price and tracking number of the content material are sent to payment database **285**, **290** with the ID of the submitter extracted from content material and stored in payment database **285**, **290**. At step **2150**, payment processor **230** searches payment database **285**, **290** by submitter ID and totals the amount owed to the submitter. As with billing the third party end user, the submitter could be paid using either a cash on delivery or credit protocol. Cash on delivery works the same for the submitter as it does for the third party end user. Payment is made immediately. In the credit protocol, the submitter has an account with central controller **200** that maintains a balance for the submitter. At step **2160**, the preferred payment method is retrieved from third party database **270**, and the appropriate payment module is initiated at step **2170** before ending the process, step **2180**. This step may be held up until payment has been received from the third party end user. During the period between payments, while the submitter still has a balance of funds due, it would be possible for the submitter to use these funds to purchase content material for himself, with the amount deducted from the balance represented in payment database **285**, **290**. Although the above protocols describe a number of ways in which payments may flow from third party end user to submitter, it is important to note the methods by which central controller **200** may generate revenues for services provided.

In one embodiment, a flat fee is charged for every third party end user request submitted, with the third party end user paying the fee in addition to reimbursing the submitter. There could also be flat fees that would cover any number of transactions over a given period of time, allowing third party end users to subscribe to the service much as they would subscribe to a newspaper. In another embodiment, central controller **200** creates a bid/ask spread in which third party end users are charged a premium over the cost of the submitter or content material. If a submitter requires $1,000

for content material, central controller **200** may mark this up by 20%, charging the third party end user $1,200. Submitters may be retained by central controller **200** on a salaried basis, with revenues collected from third party end users paying those salaries. In yet another embodiment, advertisers pay to have messages included in third party end user request, content material, or web pages of central controller **200**. Advertising revenues then partially or fully offset the cost of content material. Payments to submitters for content material produced may also be reduced in exchange for the advertising message displayed at central controller **200** in requests or content material. Alternatively, the method and apparatus of the present invention may be employed without a payment feature.

Once the amount owed by the third party end user and the amount to be paid to the submitter has been calculated, appropriate billing and payment methods are initiated.

FIG. **22** illustrates an exemplary payment and billing procedure using credit cards as the primary transaction vehicle. The advantage of this system is its simplicity. No bank account is necessary, and no paper transactions are required. At step **2200**, central controller **200** looks up the credit card number of the third party end user in creator/third party end user databases **260**, **270**. At step **2205**, this credit card number is transmitted to billing processor **225**. Billing processor **225** contacts the credit card clearinghouse to get an authorization number at step **2210**. The billable amount appears on the credit card statement of the third party end user at step **2215**. At step **2220**, the clearinghouse posts this amount to central controller **200** account. At step **2225**, central controller **200** updates billing database **285**, **290** to indicate that payment has been made. A similar process occurs on the payment side. At step **2230**, central controller **200** looks up the credit card number of the submitter in member/submitter **255**. At step **2235**, this credit card number is transmitted to payment processor **230**. Payment processor **230** contacts the issuing bank to verify that the account is still active at step **2240**. Value is added to the submitter's credit card account at step **2245**, where it shows up as a credit on his/her monthly bill. At step **2250**, central controller **200** updates payment database **285**, **290** to indicate that payment has been made.

FIG. **23** illustrates a payment procedure involving standard bank checks. In billing the third party end user, central controller **200** looks up his mailing address at step **2300** in creator/third party end user databases **260** and **270**. This address is transmitted to billing processor **225** at step **2310**. A bill is mailed to the third party end user at step **2320**, and the check is received from the third party end user at step **2330**. At step **2340**, central controller **200** updates billing database **285**, **290** to indicate that payment has been made. At step **2350**, central controller **200** looks up the mailing address of the submitter in member/submitter database **255**. This information is transmitted to payment processor **230** at step **2360**. Payment processor **230** then automatically cuts a hard copy check, payable to the submitter, which is then mailed to the submitter at step **2370**. At step **2380**, central controller **200** updates payment database **285**, **290** to indicate that payment has been made.

Referring now to FIG. **24**, there is illustrated a procedure in which funds are transferred via electronic funds transfer (EFT). At step **2400**, the bank account number of the third party end user is looked up in creator/third party end user databases **260**, **270**. This account number is transmitted to billing processor **225** at step **2410**, followed by the transfer of funds directly into the account of central controller **200** at step **2420**. At step **2430**, central controller **200** updates billing database **285**, **290** to indicate that payment has been made. Paying the submitter is essentially the reverse process. At step **2440**, central controller **200** searches member/submitter database **255** for the bank account number of the submitter. This bank account number is transmitted to payment processor **230** at step **2450**, which transfers the money directly into the account of the submitter at step **2460**. At step **2470**, payment database **285**, **290** is updated to indicate that payment has been made.

Referring now to FIG. **25**, there are shown commercial transaction procedures using digital cash. For billing the third party end user, central controller **200** looks up the third party end user's electronic delivery address in creator/third party end user databases **260**, **270** at step **2500**. This address is transmitted to billing processor **225** at step **2510**, with the digital cash being downloaded from the third party end user at step **2520**. At step **2530**, central controller **200** updates billing database **285**, **290** to indicate that payment has been made. Payment to the submitter proceeds similarly. At step **2540**, the electronic delivery address is sent to payment processor **230**. This address might be an electronic mail address if the digital cash is to be transferred by electronic mail, or it could be an Internet Protocol address or URL capable of accepting an online transfer of digital cash. At step **2550**, this electronic delivery address is sent to payment processor **230**. At step **2560**, the digital cash is downloaded to the submitter. At step **2570**, central controller **200** updates payment database **285**, **295** to indicate that payment has been made. Using these digital cash protocols, it is possible for the third party end user to include payment along with third party end user request in e-mail form. A third party end user who had already negotiated a final price with a submitter for content material, for example, could include digital cash along with his/her confirmation of the acceptability of the price. The practice of using digital cash protocols to effect payment is well known in the art and need not be described here in detail. For reference, one of ordinary skill in the art may refer to Daniel C. Lynch and Leslie Lundquist, Digital Money, John Wiley & Sons, 1996; or Seth Godin, Presenting Digital Cash, Sams Net Publishing, 1995.

APPLICATIONS OF THE INVENTION

In order to clarify the object of the present invention, the following examples demonstrate some of the invention's applications from either the creators or third party end user's perspective. These applications may are exemplary only and are not intended to be inclusive of all potential uses of the invention. It should also be noted that the examples described below may include The Contest and Points Awards Program features, and other features of the invention, as described above.

A creator wants to develop a game show where information is gathered about the public's perception on various issues. In this interactive feature, creative content developed by the show's producers is then posed to the public. By simply answering polls, surveys, and other entertaining questions, the producers will be able to gather specific content material targeted to the show's format. The game show is willing to pay $250 for content material used in the show, and a pre-determined number of points will also be awarded for entering sweepstakes and/or the purchase of cash or merchandise awards. The responses will be brief and easy for the creator to disseminate.

A Production company, acting as a third party end user, is looking to produce a feature film about the story of an

individual who survived against extraordinary odds in military combat. This content can either be factual or fictional. A request through the network has been submitted to receive a his/her personal story or script relating to this subject. The production company is willing to pay the submitter $50,000 for the exclusive rights to such an account. Submitters are given a two-month deadline to submit their content material, after which the search and selection process will begin. The production company has also elected to participate in the points awards program, offering submitters a pre-determined number of points for their participation.

A music company executive, acting as a third party end user, is looking for a talented lyricist, arrives at the exchange to perform an open search. After performing an extensive search the music executive selects specific content material in the form of lyrics to be applied to the music of an already signed artist. The music executive now makes a bid of $5,000 for the lyrics of the submitter. The bid is accepted and the music company retains non-exclusive rights to the material.

A creator wants to put together a country western CD of 10 songs from an assortment of talented but relatively unknown artists. The compilation will serve to promote the up and coming new artists as well as country western music. In his/her effort to finding the music, the creator submits a request for country western music with the specific requirements he/she is looking for and a three-month deadline for the music submissions. Submitters record their music and transfer the audio files over the Internet to the exchange. After the deadline, the creator searches the music content database under the requested classification and selects ten songs from the submissions, electing to pay the groups $20,000 for each recording. One group had two recordings selected for the CD. Everyone participating in the country western music request receives a pre-determined number of points for entering sweepstakes and/or the purchase of cash or merchandise awards.

A novelty distributor, acting as a third party end user, would like to develop a calendar with the concept of funny things children like do or say. The distributor/creator of these novelty items has put a request through the network to receive this type of entertaining information from parents throughout the world. The distributor is willing to pay $100 for each submission selected for printing in the 2001-year calendar. A total of 365 submissions will be selected for the final product. Submitters are given a 5-month deadline to submit their content. The distributor requests that all content be factual. Aside from the $100 incentive the submitter will also see their child's story printed on thousands of calendars sold across the nation.

The creator is seeking humorous and original material for a new line of greeting cards. All content must be no more than 10 words on the front and no more than 20 words inside the card. A request through the network has been submitted to receive a greeting card concept that meets these parameters. While the creator is looking for mainly humorous copy concepts, they will accept accompanying illustrations (although they are not mandatory). The creator is willing to pay $250 for each selected greeting card idea. Prior greeting card writing experience is not necessary; just cleaver, fresh, humorous ideas that the creator feels there is a niche for. Creator has also chosen to participate in a points awards program offering a predetermined number of points for each idea submission.

A television production company, acting as a third part end user, is looking to produce a series of one-hour documentaries. There is no specific requirement for submitted content, other than it is to be entertaining and factual. A request through the network has been submitted to receive an idea for a one-hour documentary program to be aired on syndicated television. The submitter should have a good knowledge and understanding of the idea he/she is submitting. The production company is willing to pay the submitter $5,000 for the rights to the idea. Submitters are given a three-month deadline to submit their idea, after which the search and selection process will begin. The production company has contracted time with a major syndicate to produce 5 one-hour segments.

A record label, acting as a third party end user, wants to create and produce the music of an all-boys hip-hop group. A request through the network has been submitted to locate attractive male performers between the ages of 16 and 21 who are talented at both singing and dancing (playing a musical instrument is not required). Group must consist of at least 4 and no more than 6 members. Producer's search will commence on January 1st and end on December 31st of that same year. Submitters can record their music and transfer all audio and video files over the Internet to the exchange. After the deadline, the producers will search the content database under the requested classification and select one group from among all entrants. The selected group will receive a guaranteed recording label contract along with an unspecified amount of cash.

A leading production company, acting as a third part end user, is looking to produce a full length "buddy-buddy" feature comedy film. Executives from the production company plan to perform an open search of the content database looking for content submissions, either story ideas or scripts, related to this concept. A high degree of comedy along with a cleaver story line using 2 male actors as the main characters is what the production company is looking for. The production company is willing to pay the submitter $25,000 for the exclusive rights to the content that is deemed to be a potential large box-office draw. Submitters are given a one year deadline to submit their content, after which the search and selection process will begin.

A distributor would like to develop a 365 day calendar comprised solely of dog pictures. Each page would feature a selected picture of a dog. All breeds, including mixes will be accepted for the selection process. The distributor of these calendars has submitted a request through the network to receive photographs from dog owners around the world who believe they're dog has what it takes to make the calendar. It is preferred the photographs are stored to a file and digitally transferred through the Internet to the exchange for review. A total of 365 photograph entries will be accepted from among all those received. The distributor will pay $100 for each photograph submission accepted for printing in the 2001-year calendar. The distributor will be looking for pictures of dogs only. No other animals or people should appear in the photographs. Multiple dogs may, however, appear in one photograph. All entries meeting these requirements and mailed before Sep. 19, 2000 will be accepted for entry by the distributor.

A television network, acting as a third party end user, is looking for some new humorous material it could adapt into one of its weekly sitcoms, which has recently plummeted in the ratings. Executives at the network plan to both openly search the content databases for applicable material as well as submit a request through the network. The material may include but is not limited to ideas, real life stories, scripts or anything that might stimulate humor in what has otherwise become stale weekly episodes. The network has put no timeframe on the submissions of content material hoping

this new method of receiving story ideas can be ongoing and will help improve ratings. The network plans on paying submitters $10,000 if their content material is selected, and as an added incentive selected submitters may also get a cameo in an up and coming episode. The contest format will be included as well so the public can vote and/or rate their favorite episodes, and those submitters will receive larger grand prizes.

Those skilled in the art will recognize that the method and apparatus of the present invention has many applications, and that the present invention is not limited to the representative examples disclosed herein or the preferred embodiment of television and the Internet. Moreover, the scope to the present invention covers conventionally known variations and modifications to the system components described herein, as would be known by those skilled in the art. Various other embodiments and modifications to these preferred embodiments may be made by those skilled in the art without departing form the scope or spirit of the invention. Accordingly, the invention is not to be limited, except as by the appended claims.

What is claimed is:

1. A computer-based system for generating multimedia content comprising:

(a) an electronic media submissions server subsystem including:

(1) one or more data processing apparatus,

(2) one or more database stored on a non-transitory medium; and

(3) a submissions electronic interface configured to receive a first electronic media submission from a first user of a plurality of users over a public network and store said first electronic media submission in said one or more database with at least a second electronic media submission received from a second user of the plurality of users, where the second user is not the first user,

wherein the first electronic media submission includes:

(i) data identifying the first user,

(ii) data identifying date and time associated with receipt of the first electronic media submission, and

(iii) data indicating content of the first electronic media submission;

(b) the one or more databases comprising criteria associated with one or more users of the plurality of users stored therein;

(c) an electronic multimedia creator server subsystem operatively coupled to the electronic media submissions server subsystem, including:

(1) one or more second data processing apparatus, and

(2) an electronic content filter configured to apply criteria associated with at least one user of the plurality of users to obtain a plurality of electronic media submissions from the one or more database and to develop multimedia content to be electronically available for viewing on at least one user device associated with the first user,

wherein data identifying a respective user is maintained for each electronic media submission within the multimedia content; and

(d) an electronic release subsystem operatively coupled to the electronic multimedia creator server subsystem, including one or more third data processing apparatus and configured to make the multimedia content electronically available for viewing on a plurality of user devices.

2. The computer-based system of claim **1**, wherein the first electronic media submission includes one or more images and text.

3. The computer-based system of claim **1**, wherein the submissions electronic interface is further configured to receive solicited and unsolicited electronic media submissions.

4. The computer-based system of claim **1**, wherein the first electronic media submission includes text data.

5. The computer-based system of claim **1**, wherein the computer-based system further includes an editing subsystem configured to enable the first user to edit the multimedia content.

6. The computer-based system of claim **1**, wherein the multimedia content includes video.

7. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's subject matter.

8. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's topic.

9. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's categorical information.

10. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's title.

11. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's text.

12. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's time of submission.

13. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's end user rating.

14. The computer-based system of claim **1**, wherein the electronic filter applies criteria identifying a media submission's end user votes.

15. The computer-based system of claim **1**, wherein the electronic filter applies criteria defined by keywords.

16. The computer-based system of claim **1**, wherein the electronic filter applies criteria defined by Boolean logic.

17. The computer-based system of claim **1**, further comprising an electronic voting subsystem configured to allow at least a third user to electronically vote for multimedia content.

18. The computer-based system of claim **17**, wherein the electronic voting subsystem allows at least a third user to electronically vote for an electronic media submission within the multimedia content.

19. The computer-based system of claim **17**, wherein the electronic voting subsystem allows at least a third user to electronically rate the multimedia content.

20. The computer-based system of claim **17**, wherein the electronic voting subsystem allows at least a third user to electronically rate an electronic media submission within the multimedia content.

21. The computer-based system of claim **1**, wherein the submissions electronic interface is configured to receive a third electronic media submission from the first user of a plurality of users over a public network and store said third electronic media submission in said one or more databases.

22. The computer-based system of claim 1, wherein the submissions electronic interface is configured to receive a third electronic media submission from a third user of the plurality of users over a public network and store said third electronic media submission in said one or more databases and the third user is not the first user.

* * * * *

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE REQUIREMENTS

1. This brief complies with the type-volume limitation of Federal Rules of Appellate Procedure Rule 32(a)(7)(B). The brief contains 11,880 words, excluding the parts of the brief exempted by Federal Rules of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).

2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). This brief has been prepared in a proportionally spaced typeface using Microsoft Word version Microsoft® Word for Microsoft 365 MSO (Version 2407 Build 16.0.17830.20056) 64-bit in 14-point Times New Roman Font.

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